

Education
M.B.A. Northeastern
University
B.A. Biology, Harvard
University

# **Board of Directors Memberships**

EMERA US Subsidiaries,
Member, Board of
Directors, 2015 – present
PowerOptions, Board of
Directors (Audit and
Strategic Planning
Committees), 2013 –
present
GreenerU, Inc., Member,
Board of Directors, 2011 –
2013
National Grid USA,
Member, Board of
Directors, 2000 – 2013

# John Cochrane

**Senior Managing Director** 

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john.cochrane@fticonsulting.com

John Cochrane specializes in advising gas and electric utility clients in all economic, regulatory, and financial aspects of the business. Mr. Cochrane has testified in rate matters before the FERC and at the state level, has held C-suite and other senior leadership positions at major U.S. utilities, and served as a member of the board of directors on a variety of energy sector companies, including start-ups.

Mr. Cochrane has more than 30 years of U.S. and international experience working for a utility, which includes all areas within corporate finance, mergers and acquisitions, joint ventures, partnerships, restructurings, federal and state regulation, gas and electric supply, and business development, both domestic and international. He has testified in rate case matters relating to capital structure/cost of capital, mergers and acquisitions, and financings before FERC and various state-level regulatory bodies.

#### **Experience**

- Management audit, National Grid for the MA DPU: Conducted a management audit of National Grid on behalf of the Massachusetts Department of Public Utilities ("DPU"). The audit covers the areas of strategic planning; staffing and workflow structure; EV infrastructure, IT upgrades and cybersecurity implementation; and analysis of delays in the company's solar program cluster study. For the audit, Mr. Cochrane wrote the final report's section on strategic planning after conducting interviews with dozens of National Grid employees, ranging from operational to upper management personnel.
- Rate case expert testimony, Liberty Utilities: Providing cost of capital testimony to support the Liberty Utilities' subsidiaries Granite State Electric and Energy North rate cases before the New Hampshire Public Utilities Commission and Empire Electric before the Missouri Public Service Commission, including analysis of ROE and capital structure.
- Privatization advisory, P3A: Advising the Puerto Rico Public Private Partnerships Authority ("P3A") in the development and evaluation of the solicitation to select a third-party T&D operator as well as several concurrent generation asset solicitations. Advisory support includes structuring the T&D operator contract, evaluating bid submissions, and undertaking financial and operations analysis in support of the solicitation processes, among other tasks.
- Privatization advisory, JEA: Provided regulatory advice for the privatization of
  Jacksonville Electric Authority ("JEA"), a large municipally owned electric and water
  utility located in Florida. Advisory support includes advising on regulatory financial
  treatment of generation and transmission assets and development of financial modeling
  inputs.
- Underwater transmission ROE methodology, Trans Bay Cable: Advised Trans Bay Cable, an underwater direct current transmission cable connecting San Francisco, CA to Pittsburg,



CA on the reasonableness and methodology of its ROE calculation for the three year rate case reset before FERC; provided analysis and expert advice for testimony development.

- Offshore wind transmission strategy, confidential client: Advising a large global offshore wind developer on transmission development strategy across the U.S. in order to facilitate offshore wind projects and to diversify business risks.
- M&A expert testimony, CCI: Provided expert testimony pertaining to a purchase price dispute stemming from CCI's
  acquisition of a portfolio of power plants located in PJM.
- Rate case strategy, PPL Electric: Advised PPL Electric Utilities on financial modeling and rate case strategy on the development of transmission projects in PJM.
- Water utility rate case advisory, confidential client: Advised a global infrastructure fund on financial modeling and rate
  case strategy applying to a wholly owned portfolio company, a water utility covering three separate jurisdictions in the
  U.S. southwest.
- Executive Vice President Global Business Development & Mergers and Acquisitions (most recently, among other senior roles):
  - Led all business development, mergers, acquisitions, divestitures and joint ventures globally, including the sale
    of a wide range of businesses totaling \$10 billion.
  - Led joint venture negotiations, feasibility studies, project budgets and timelines, and vendor selections for four £1 billion submarine interconnectors between the United Kingdom, Norway, Belgium, France and the Netherlands.
  - o Led Offshore Wind Transmission ("OFTO") bid submittals in the UK.
- Executive Vice President, Chief Financial Officer and Treasurer, National Grid USA:
  - Supported regulatory approval filings for several M&A deals completed by National Grid including the sale of New England Electric to National Grid, the purchase of Eastern Utilities by National Grid, the purchase of Niagara Mohawk by National Grid, the purchase of KeySpan Corp by National Grid, the purchase of Rhode Island Gas assets of Southern Union Co by National Grid, helping to create the second largest U.S. utility with a total enterprise value of \$27 billion.
  - Testified on behalf of National Grid with respect to capital structure in rate cases, in all National Grid state jurisdictions, including New Hampshire, Massachusetts, Rhode Island, New York and before FERC.
  - Testified as a witness with respect to ROE for a rate case in New Hampshire on behalf of Granite State Electric.
  - Testified on behalf of National Grid with respect to debt and equity financings including first mortgage bonds, bank agreements, private placements, common equity issuances in all National Grid state jurisdictions, including New Hampshire, Massachusetts, Rhode Island, New York and before FERC.
  - Managed ROE expert testimony preparation on behalf of National Grid in all National Grid state jurisdictions, including New Hampshire, Massachusetts, Rhode Island, New York and before FERC.
  - Managed the preparation of FERC ROE filing for two DC transmission lines from Canada in New Hampshire and Massachusetts.
  - Testified in arbitration case involving a new power company, New England Energy and Keystone Shipping over a coal shipping joint venture dispute.
  - Testified in arbitration case involving Hydro Quebec and ISO New England over transmission agreements dispute for HQ Phase I and Phase II projects.
  - Ran the sale process on behalf of National Grid for Granite State and EnergyNorth, purchased by Liberty Utilities.



- Led the commercial and regulatory negotiations for the formation of a \$3 billion FERC regulated Transco amongst the six New York transmission owners.
- Key member of deal team closing a \$2.5 billion generation portfolio in the U.S. northeast, responsible for portfolio valuation and complementary insights from indicative bid through closing the transaction.
- Served as a U.S. board member on US/European companies involved in cross-border tax structures including Luxemburg, Ireland, Jersey, Iceland and Malta.
- Treasurer (most recently, among other senior roles), New England Electric Systems

## **Select Testimony**

Sponsor	Date	Applicant(s)	Docket/Case	Subject
		Missouri Public Service (	Commission	
The Empire District Electric Company	03/2020	The Empire District Electric Company	ER-2019-0374	Affiliate Transactions / Financing
		New Hampshire Public Utilit	ies Commission	
EnergyNorth Natural Gas	07/2020	EnergyNorth Natural Gas	DG 20-105	Cost of Capital
EnergyNorth Natural Gas	11/2019	EnergyNorth Natural Gas	DG 19-161	Cost of Capital
Granite State Electric Company	04/2019	Granite State Electric Company	DG 19-064	Cost of Capital
National Grid USA	08/2006	National Grid USA; EnergyNorth Natural Gas	DG 06-107	Merger
Granite State Electric Company	11/1992	Granite State Electric Company	DF 92-219	Financing
	N	Massachusetts Department o	of Public Utilities	
New England Power Company	10/1997	USGen New England, Inc; New England Power Company; Massachusetts Electric Company; Nantucket Electric Company	DPU 97-94	Financing
New England Electric System	05/1995	New England Electric System; Nantucket Electric Company	DPU 95-67	Merger



		New York Department of F	Public Service	Page 4 of 5
		New York Department of T	dolle service	
National Grid plc	10/2006	National Grid plc; KeySpan Corporation	PSC Case 06-M-0878	Merger
		Federal Energy Regulatory	Commission	
New England Power Company; Massachusetts Electric Company; The Narragansett Electric Company; Granite State Electric Company	09/1997	New England Power Company; Massachusetts Electric Company; The Narragansett Electric Company; Granite State Electric Company	OA96-74-000	Capital Structure and Cost of Capital
New England Power Company	01/1997	New England Power Company	ER-97-1115	Financing
NEES Transmission Services, Inc.; New England Power Company; Massachusetts Electric Company; The Narragansett Electric Company; Granite State Electric Company	03/1996	NEES Transmission Services, Inc.; New England Power Company; Massachusetts Electric Company; The Narragansett Electric Company; Granite State Electric Company	ER96-1309-000	Capital Structure and Cost of Capital
New England Power Company	09/1995	Tennessee Gas Pipeline Co	RP95-112-000	Return on Equity
New England Power Company	12/1994	New England Power Company	Docket ER95-267	Capital Structure and Cost of Capital



# **Summary of Results**

Constant	Constant Growth DCF - Earnings Growth											
Mean	Low ROE	Mid ROE	High ROE									
30-Day Average	7.86%	9.62%	11.70%									
90-Day Average	8.07%	9.84%	11.91%									
180-Day Average	8.23%	9.99%	12.07%									
Average	8.05%	9.82%	11.89%									

	Multi-Stage Growth DCF		
Mean	Low ROE	Mid ROE	High ROE
30-Day Average	8.86%	9.27%	9.83%
90-Day Average	9.09%	9.51%	10.10%
180-Day Average	9.25%	9.69%	10.31%
Average	9.07%	9.49%	10.08%

САРМ						
Current 30-Day Treasury	CAPM					
30-Day Average	12.65%					
90-Day Average	12.64%					
180-Day Average	12.61%					
Average	12.64%					

Flotation Cost Adjustment 0.10%
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Zon	e of Reasonableness		
Method	Low ROE	Mid ROE	High ROE
Constant Growth DCF	8.05%	9.82%	11.89%
Multi-Stage DCF	9.07%	9.49%	10.08%
CAPM	12.64%	12.64%	12.64%
Mean	9.92%	10.65%	11.54%
With Flotation Costs	10.02%	10.75%	11.64%

#### **Proxy Group Selection Criteria**

		[1]	[2]	[3]	[4]	[5]	[6]
			Positive Earnings				
		Constate with Bold	Growth Estimates	Party to Merger or	COD1 T	AA dodo to o - Tours	Percent of Operating
	o. 1 = 1	Consistently Paid	From At Least Two	Other Significant	S&P Long-Term	Moody's Long-Term	
Company Name	Stock Ticker	Dividends?	Analysts?	Transaction?	Issuer Rating	Issuer Rating	Regulated Gas Operations
Atmos Energy	ATO	Yes	Yes	No	A-	A1	100.0%
Chesapeake Utilities	СРК	Yes	Yes	No			81.7%
NiSource Inc.	NI	Yes	Yes	No	BBB+	Baa2	63.5%
New Jersey Resources	NJR	Yes	Yes	No		A1	80.1%
Northwest Natural	NWN	Yes	Yes	No	A+	Baa1	99.5%
ONE Gas Inc.	OGS	Yes	Yes	No	BBB+	A3	100.0%
South Jersey Inds.	SJI	Yes	Yes	No	BBB	A3	92.6%
Spire Inc.	SR	Yes	Yes	No	A-	Baa2	96.3%
Southwest Gas	SWX	Yes	Yes	No	BBB+	Baa1	71.5%

[1] Source: Value Line

[2] Source: Value Line, Zack's, Yahoo Finance

[3] Source: Company 10Ks

[4] Source: S&P Global Market Intelligence

[5] Source: Moody's[6] Source: Company 10Ks

#### Constant Growth Discounted Cash Flow Model Earnings Growth 30 Day Average Stock Price

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
							Yahoo					
		Indicated	Weighted-			Zacks	Finance	Value Line	Average			
		Annual	Average Stock	(	Expected	Earnings	Earnings	Earnings	Earnings		Mid	
Company	Ticker	Dividend	Price	Dividend Yield	d Dividend Yield	Growth	Growth	Growth	Growth	Low ROE	ROE	High ROE
Atmos Energy	ATO	\$2.65	\$101.26	2.62%	2.71%	7.30%	7.17%	7.00%	7.16%	9.71%	9.87%	10.01%
Chesapeake Utilities	CPK	\$1.96	\$118.66	1.65%	1.71%	NA	4.74%	8.50%	6.62%	6.43%	8.33%	10.22%
NiSource Inc.	NI	\$0.88	\$25.69	3.43%	3.54%	6.40%	3.52%	9.50%	6.47%	7.01%	10.01%	13.09%
New Jersey Resources	NJR	\$1.33	\$42.46	3.13%	3.21%	7.10%	6.00%	2.00%	5.03%	5.16%	8.24%	10.34%
Northwest Natural	NWN	\$1.92	\$54.40	3.53%	3.61%	3.90%	3.80%	5.50%	4.40%	7.40%	8.01%	9.13%
ONE Gas Inc.	OGS	\$2.40	\$77.52	3.10%	3.18%	5.00%	5.00%	6.00%	5.33%	8.17%	8.51%	9.19%
South Jersey Inds.	SJI	\$1.28	\$25.06	5.11%	5.29%	5.40%	4.90%	11.50%	7.27%	10.13%	12.56%	16.90%
Spire Inc.	SR	\$2.66	\$75.24	3.54%	3.67%	5.50%	7.31%	10.00%	7.60%	9.13%	11.27%	13.71%
Southwest Gas	SWX	\$2.42	\$69.03	3.51%	3.61%	5.50%	4.00%	9.00%	6.17%	7.58%	9.78%	12.66%
Mean				3.29%	3.39%	5.76%	5.16%	7.67%	6.23%	7.86%	9.62%	11.70%
Median				3.43%	3.54%	5.50%	4.90%	8.50%	6.47%	7.58%	9.78%	10.34%

[1] Source: Value Line

[2] Source: Yahoo Finance, as of May 25, 2021

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 0.5 x [8])

[5] Source: Zacks

[6] Source: Yahoo Finance

[7] Source: Value Line

[8] Equals average ([5], [6], [7])

[9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])

[10] Equals [4] + [8]

[11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

#### Constant Growth Discounted Cash Flow Model Earnings Growth 90 Day Average Stock Price

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
							Yahoo					
		Indicated	Weighted-			Zacks	Finance	Value Line	Average			
		Annual	Average Stock	(	Expected	Earnings	Earnings	Earnings	Earnings			
Company	Ticker	Dividend	Price	Dividend Yield	Dividend Yield	Growth	Growth	Growth	Growth	Low ROE	Mid ROE	High ROE
Atmos Energy	ATO	\$2.65	\$94.25	2.81%	2.91%	7.30%	7.17%	7.00%	7.16%	9.91%	10.07%	10.21%
Chesapeake Utilities	CPK	\$1.96	\$111.79	1.75%	1.81%	NA	4.74%	8.50%	6.62%	6.53%	8.43%	10.33%
NiSource Inc.	NI	\$0.88	\$23.87	3.69%	3.81%	6.40%	3.52%	9.50%	6.47%	7.27%	10.28%	13.36%
New Jersey Resources	NJR	\$1.33	\$39.82	3.34%	3.42%	7.10%	6.00%	2.00%	5.03%	5.37%	8.46%	10.56%
Northwest Natural	NWN	\$1.92	\$49.62	3.87%	3.95%	3.90%	3.80%	5.50%	4.40%	7.74%	8.35%	9.48%
ONE Gas Inc.	OGS	\$2.40	\$74.44	3.22%	3.31%	5.00%	5.00%	6.00%	5.33%	8.30%	8.64%	9.32%
South Jersey Inds.	SJI	\$1.28	\$23.91	5.35%	5.55%	5.40%	4.90%	11.50%	7.27%	10.38%	12.81%	17.16%
Spire Inc.	SR	\$2.66	\$70.15	3.79%	3.94%	5.50%	7.31%	10.00%	7.60%	9.40%	11.54%	13.98%
Southwest Gas	SWX	\$2.42	\$66.26	3.65%	3.77%	5.50%	4.00%	9.00%	6.17%	7.73%	9.93%	12.82%
Mean				3.50%	3.61%	5.76%	5.16%	7.67%	6.23%	8.07%	9.84%	11.91%
Median				3.65%	3.77%	5.50%	4.90%	8.50%	6.47%	7.74%	9.93%	10.56%

[1] Source: Value Line

[2] Source: Yahoo Finance, as of May 25, 2021

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 0.5 x [8])

[5] Source: Zacks

[6] Source: Yahoo Finance

[7] Source: Value Line

[8] Equals average ([5], [6], [7])

[9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])

[10] Equals [4] + [8]

[11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

#### Constant Growth Discounted Cash Flow Model Earnings Growth 180 Day Average Stock Price

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
							Yahoo					
		Indicated	Weighted-			Zacks	Finance	Value Line	Average			
		Annual	Average Stock	(	Expected	Earnings	Earnings	Earnings	Earnings			
Company	Ticker	Dividend	Price	<b>Dividend Yield</b>	Dividend Yield	Growth	Growth	Growth	Growth	Low ROE	Mid ROE	High ROE
Atmos Energy	ATO	\$2.65	\$94.89	2.79%	2.89%	7.30%	7.17%	7.00%	7.16%	9.89%	10.05%	10.19%
Chesapeake Utilities	CPK	\$1.96	\$97.62	2.01%	2.07%	NA	4.74%	8.50%	6.62%	6.80%	8.69%	10.59%
NiSource Inc.	NI	\$0.88	\$23.47	3.75%	3.87%	6.40%	3.52%	9.50%	6.47%	7.34%	10.34%	13.43%
New Jersey Resources	NJR	\$1.33	\$35.75	3.72%	3.81%	7.10%	6.00%	2.00%	5.03%	5.76%	8.85%	10.95%
Northwest Natural	NWN	\$1.92	\$48.33	3.97%	4.06%	3.90%	3.80%	5.50%	4.40%	7.85%	8.46%	9.58%
ONE Gas Inc.	OGS	\$2.40	\$74.23	3.23%	3.32%	5.00%	5.00%	6.00%	5.33%	8.31%	8.65%	9.33%
South Jersey Inds.	SJI	\$1.28	\$22.98	5.57%	5.77%	5.40%	4.90%	11.50%	7.27%	10.61%	13.04%	17.39%
Spire Inc.	SR	\$2.66	\$64.87	4.10%	4.26%	5.50%	7.31%	10.00%	7.60%	9.71%	11.86%	14.31%
Southwest Gas	SWX	\$2.42	\$65.36	3.70%	3.82%	5.50%	4.00%	9.00%	6.17%	7.78%	9.98%	12.87%
Mean				3.65%	3.76%	5.76%	5.16%	7.67%	6.23%	8.23%	9.99%	12.07%
Median				3.72%	3.82%	5.50%	4.90%	8.50%	6.47%	7.85%	9.98%	10.95%

[1] Source: Value Line

[2] Source: Yahoo Finance, as of May 25, 2021

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 0.5 x [8])

[5] Source: Zacks

[6] Source: Yahoo Finance

[7] Source: Value Line

[8] Equals average ([5], [6], [7])

[9] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7])) + Minimum([5], [6], [7])

[10] Equals [4] + [8]

[11] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7])) + Maximum([5], [6], [7])

#### Multi-Stage Discounted Cash Flow Model 30 Day Average Stock Price Low Growth Rate

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
		Yahoo					-		Seco	nd Stage Gr	owth		_	
		Indicated	Weighted-	Zacks	Finance	Value Line								
		Annual	Average	Earnings	Earnings	Earnings	First Stage						Third Stage	
Company	Ticker	Dividend	Stock Price	Growth	Growth	Growth	Growth	Year 6	Year 7	Year 8	Year 9	Year 10	Growth	ROE
Atmos Energy	ATO	\$2.65	\$101.26	7.30%	7.17%	7.00%	7.00%	6.75%	6.50%	6.24%	5.99%	5.74%	5.49%	8.61%
Chesapeake Utilities	CPK	\$1.96	\$118.66	NA	4.74%	8.50%	4.74%	4.86%	4.99%	5.11%	5.24%	5.36%	5.49%	7.17%
NiSource Inc.	NI	\$0.88	\$25.69	6.40%	3.52%	9.50%	3.52%	3.85%	4.18%	4.50%	4.83%	5.16%	5.49%	8.79%
New Jersey Resources	NJR	\$1.33	\$42.46	7.10%	6.00%	2.00%	2.00%	2.58%	3.16%	3.74%	4.33%	4.91%	5.49%	8.20%
Northwest Natural	NWN	\$1.92	\$54.40	3.90%	3.80%	5.50%	3.80%	4.08%	4.36%	4.64%	4.93%	5.21%	5.49%	8.95%
ONE Gas Inc.	OGS	\$2.40	\$77.52	5.00%	5.00%	6.00%	5.00%	5.08%	5.16%	5.24%	5.33%	5.41%	5.49%	8.76%
South Jersey Inds.	SJI	\$1.28	\$25.06	5.40%	4.90%	11.50%	4.90%	5.00%	5.10%	5.19%	5.29%	5.39%	5.49%	10.97%
Spire Inc.	SR	\$2.66	\$75.24	5.50%	7.31%	10.00%	5.50%	5.50%	5.50%	5.49%	5.49%	5.49%	5.49%	9.36%
Southwest Gas	SWX	\$2.42	\$69.03	5.50%	4.00%	9.00%	4.00%	4.25%	4.50%	4.74%	4.99%	5.24%	5.49%	8.97%
													Mean	8.86%
													Median	8.79%
													Max	10.97%
													Min	7.17%

<sup>[1]</sup> Source: Value Line

<sup>[2]</sup> Source: Yahoo Finance, as of May 25, 2021

<sup>[3]</sup> Source: Zacks

<sup>[4]</sup> Source: Yahoo Finance

<sup>[5]</sup> Source: Value Line

<sup>[6]</sup> Equals minimum ([3], [4], [5]) [7] Equals [6] + ([12] - [6]) / 6 [8] Equals [6] + ([12] - [6]) / 6 [9] Equals [6] + ([12] - [6]) / 6 [10] Equals [6] + ([12] - [6]) / 6

<sup>[11]</sup> Equals [6] + ([12] - [6]) / 6

<sup>[12]</sup> Source: Federal Reserve Bank of St. Louis; Energy Information Administration
[13] Equals internal rate of return of cash flows resulting from Excel's goal seek function

#### Multi-Stage Discounted Cash Flow Model 30 Day Average Stock Price Average Growth Rate

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
					Yahoo		_		Seco	nd Stage Gr	owth		_	
		Indicated	Weighted-	Zacks	Finance	Value Line								
		Annual	Average	Earnings	Earnings	Earnings	First Stage						Third Stage	
Company	Ticker	Dividend	Stock Price	Growth	Growth	Growth	Growth	Year 6	Year 7	Year 8	Year 9	Year 10	Growth	ROE
Atmos Energy	ATO	\$2.65	\$101.26	7.30%	7.17%	7.00%	7.16%	6.88%	6.60%	6.32%	6.05%	5.77%	5.49%	8.64%
Chesapeake Utilities	CPK	\$1.96	\$118.66	NA	4.74%	8.50%	6.62%	6.43%	6.24%	6.05%	5.87%	5.68%	5.49%	7.40%
NiSource Inc.	NI	\$0.88	\$25.69	6.40%	3.52%	9.50%	6.47%	6.31%	6.15%	5.98%	5.82%	5.65%	5.49%	9.47%
New Jersey Resources	NJR	\$1.33	\$42.46	7.10%	6.00%	2.00%	5.03%	5.11%	5.19%	5.26%	5.34%	5.41%	5.49%	8.80%
Northwest Natural	NWN	\$1.92	\$54.40	3.90%	3.80%	5.50%	4.40%	4.58%	4.76%	4.94%	5.13%	5.31%	5.49%	9.09%
ONE Gas Inc.	OGS	\$2.40	\$77.52	5.00%	5.00%	6.00%	5.33%	5.36%	5.39%	5.41%	5.44%	5.46%	5.49%	8.83%
South Jersey Inds.	SJI	\$1.28	\$25.06	5.40%	4.90%	11.50%	7.27%	6.97%	6.67%	6.38%	6.08%	5.79%	5.49%	11.79%
Spire Inc.	SR	\$2.66	\$75.24	5.50%	7.31%	10.00%	7.60%	7.25%	6.90%	6.55%	6.19%	5.84%	5.49%	9.90%
Southwest Gas	SWX	\$2.42	\$69.03	5.50%	4.00%	9.00%	6.17%	6.05%	5.94%	5.83%	5.72%	5.60%	5.49%	9.49%
													Mean	9.27%
													Median	9.09%
													Max	11.79%
													Min	7.40%

<sup>[1]</sup> Source: Value Line

<sup>[2]</sup> Source: Yahoo Finance, as of May 25, 2021

<sup>[3]</sup> Source: Zacks

<sup>[4]</sup> Source: Yahoo Finance

<sup>[5]</sup> Source: Value Line

<sup>[3]</sup> Source: Value Line [6] Equals average ([3], [4], [5]) [7] Equals [6] + ([12] - [6]) / 6 [8] Equals [6] + ([12] - [6]) / 6 [9] Equals [6] + ([12] - [6]) / 6 [10] Equals [6] + ([12] - [6]) / 6

<sup>[11]</sup> Equals [6] + ([12] - [6]) / 6

<sup>[12]</sup> Source: Federal Reserve Bank of St. Louis; Energy Information Administration [13] Equals internal rate of return of cash flows resulting from Excel's goal seek function

#### Multi-Stage Discounted Cash Flow Model 30 Day Average Stock Price **High Growth Rate**

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
					Yahoo		<u>-</u>		Seco	nd Stage Gr	owth		_	
		Indicated	Weighted-	Zacks	Finance	Value Line								
		Annual	Average	Earnings	Earnings	Earnings	First Stage						Third Stage	
Company	Ticker	Dividend	Stock Price	Growth	Growth	Growth	Growth	Year 6	Year 7	Year 8	Year 9	Year 10	Growth	ROE
Atmos Energy	ATO	\$2.65	\$101.26	7.30%	7.17%	7.00%	7.30%	7.00%	6.70%	6.39%	6.09%	5.79%	5.49%	8.67%
Chesapeake Utilities	CPK	\$1.96	\$118.66	NA	4.74%	8.50%	8.50%	8.00%	7.50%	6.99%	6.49%	5.99%	5.49%	7.65%
NiSource Inc.	NI	\$0.88	\$25.69	6.40%	3.52%	9.50%	9.50%	8.83%	8.16%	7.49%	6.83%	6.16%	5.49%	10.27%
New Jersey Resources	NJR	\$1.33	\$42.46	7.10%	6.00%	2.00%	7.10%	6.83%	6.56%	6.29%	6.03%	5.76%	5.49%	9.27%
Northwest Natural	NWN	\$1.92	\$54.40	3.90%	3.80%	5.50%	5.50%	5.50%	5.50%	5.49%	5.49%	5.49%	5.49%	9.35%
ONE Gas Inc.	OGS	\$2.40	\$77.52	5.00%	5.00%	6.00%	6.00%	5.91%	5.83%	5.74%	5.66%	5.57%	5.49%	8.97%
South Jersey Inds.	SJI	\$1.28	\$25.06	5.40%	4.90%	11.50%	11.50%	10.50%	9.50%	8.49%	7.49%	6.49%	5.49%	13.44%
Spire Inc.	SR	\$2.66	\$75.24	5.50%	7.31%	10.00%	10.00%	9.25%	8.50%	7.74%	6.99%	6.24%	5.49%	10.57%
Southwest Gas	SWX	\$2.42	\$69.03	5.50%	4.00%	9.00%	9.00%	8.41%	7.83%	7.24%	6.66%	6.07%	5.49%	10.24%
													Mean	9.83%
													Median	9.35%
													Max	13.44%
													Min	7.65%

<sup>[1]</sup> Source: Value Line

<sup>[2]</sup> Source: Yahoo Finance, as of May 25, 2021

<sup>[3]</sup> Source: Zacks

<sup>[4]</sup> Source: Yahoo Finance

<sup>[5]</sup> Source: Value Line

<sup>[5]</sup> Source: Value Line [6] Equals maximum ([3], [4], [5]) [7] Equals [6] + ([12] - [6]) / 6 [8] Equals [6] + ([12] - [6]) / 6 [9] Equals [6] + ([12] - [6]) / 6 [10] Equals [6] + ([12] - [6]) / 6 [11] Equals [6] + ([12] - [6]) / 6

<sup>[12]</sup> Source: Federal Reserve Bank of St. Louis; Energy Information Administration
[13] Equals internal rate of return of cash flows resulting from Excel's goal seek function

#### Multi-Stage Discounted Cash Flow Model 90 Day Average Stock Price Low Growth Rate

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
					Yahoo		_		Seco	nd Stage Gr	owth		_	
		Indicated	Weighted-	Zacks	Finance	Value Line								
		Annual	Average	Earnings	Earnings	Earnings	First Stage						Third Stage	
Company	Ticker	Dividend	Stock Price	Growth	Growth	Growth	Growth	Year 6	Year 7	Year 8	Year 9	Year 10	Growth	ROE
Atmos Energy	ATO	\$2.65	\$94.25	7.30%	7.17%	7.00%	7.00%	6.75%	6.50%	6.24%	5.99%	5.74%	5.49%	8.85%
Chesapeake Utilities	CPK	\$1.96	\$111.79	NA	4.74%	8.50%	4.74%	4.86%	4.99%	5.11%	5.24%	5.36%	5.49%	7.28%
NiSource Inc.	NI	\$0.88	\$23.87	6.40%	3.52%	9.50%	3.52%	3.85%	4.18%	4.50%	4.83%	5.16%	5.49%	9.05%
New Jersey Resources	NJR	\$1.33	\$39.82	7.10%	6.00%	2.00%	2.00%	2.58%	3.16%	3.74%	4.33%	4.91%	5.49%	8.39%
Northwest Natural	NWN	\$1.92	\$49.62	3.90%	3.80%	5.50%	3.80%	4.08%	4.36%	4.64%	4.93%	5.21%	5.49%	9.30%
ONE Gas Inc.	OGS	\$2.40	\$74.44	5.00%	5.00%	6.00%	5.00%	5.08%	5.16%	5.24%	5.33%	5.41%	5.49%	8.90%
South Jersey Inds.	SJI	\$1.28	\$23.91	5.40%	4.90%	11.50%	4.90%	5.00%	5.10%	5.19%	5.29%	5.39%	5.49%	11.25%
Spire Inc.	SR	\$2.66	\$70.15	5.50%	7.31%	10.00%	5.50%	5.50%	5.50%	5.49%	5.49%	5.49%	5.49%	9.65%
Southwest Gas	SWX	\$2.42	\$66.26	5.50%	4.00%	9.00%	4.00%	4.25%	4.50%	4.74%	4.99%	5.24%	5.49%	9.13%
													Mean	9.09%
													Median	9.05%
													Max	11.25%
													Min	7.28%

<sup>[1]</sup> Source: Value Line

<sup>[2]</sup> Source: Yahoo Finance, as of May 25, 2021

<sup>[3]</sup> Source: Zacks

<sup>[4]</sup> Source: Yahoo Finance

<sup>[5]</sup> Source: Value Line

<sup>[6]</sup> Equals minimum ([3], [4], [5]) [7] Equals [6] + ([12] - [6]) / 6 [8] Equals [6] + ([12] - [6]) / 6 [9] Equals [6] + ([12] - [6]) / 6 [10] Equals [6] + ([12] - [6]) / 6

<sup>[11]</sup> Equals [6] + ([12] - [6]) / 6

<sup>[12]</sup> Source: Federal Reserve Bank of St. Louis; Energy Information Administration
[13] Equals internal rate of return of cash flows resulting from Excel's goal seek function

#### Multi-Stage Discounted Cash Flow Model 90 Day Average Stock Price Average Growth Rate

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
					Yahoo		-		Seco	nd Stage Gr	owth		_	
		Indicated	Weighted-	Zacks	Finance	Value Line								
		Annual	Average	Earnings	Earnings	Earnings	First Stage						Third Stage	
Company	Ticker	Dividend	Stock Price	Growth	Growth	Growth	Growth	Year 6	Year 7	Year 8	Year 9	Year 10	Growth	ROE
Atmos Energy	ATO	\$2.65	\$94.25	7.30%	7.17%	7.00%	7.16%	6.88%	6.60%	6.32%	6.05%	5.77%	5.49%	8.88%
Chesapeake Utilities	CPK	\$1.96	\$111.79	NA	4.74%	8.50%	6.62%	6.43%	6.24%	6.05%	5.87%	5.68%	5.49%	7.52%
NiSource Inc.	NI	\$0.88	\$23.87	6.40%	3.52%	9.50%	6.47%	6.31%	6.15%	5.98%	5.82%	5.65%	5.49%	9.78%
New Jersey Resources	NJR	\$1.33	\$39.82	7.10%	6.00%	2.00%	5.03%	5.11%	5.19%	5.26%	5.34%	5.41%	5.49%	9.03%
Northwest Natural	NWN	\$1.92	\$49.62	3.90%	3.80%	5.50%	4.40%	4.58%	4.76%	4.94%	5.13%	5.31%	5.49%	9.45%
ONE Gas Inc.	OGS	\$2.40	\$74.44	5.00%	5.00%	6.00%	5.33%	5.36%	5.39%	5.41%	5.44%	5.46%	5.49%	8.97%
South Jersey Inds.	SJI	\$1.28	\$23.91	5.40%	4.90%	11.50%	7.27%	6.97%	6.67%	6.38%	6.08%	5.79%	5.49%	12.11%
Spire Inc.	SR	\$2.66	\$70.15	5.50%	7.31%	10.00%	7.60%	7.25%	6.90%	6.55%	6.19%	5.84%	5.49%	10.22%
Southwest Gas	SWX	\$2.42	\$66.26	5.50%	4.00%	9.00%	6.17%	6.05%	5.94%	5.83%	5.72%	5.60%	5.49%	9.66%
													Mean	9.51%
													Median	9.45%
													Max	12.11%
													Min	7.52%

<sup>[1]</sup> Source: Value Line

<sup>[2]</sup> Source: Yahoo Finance, as of May 25, 2021

<sup>[3]</sup> Source: Zacks

<sup>[4]</sup> Source: Yahoo Finance

<sup>[5]</sup> Source: Value Line

<sup>[3]</sup> Source: Value Line [6] Equals average ([3], [4], [5]) [7] Equals [6] + ([12] - [6]) / 6 [8] Equals [6] + ([12] - [6]) / 6 [9] Equals [6] + ([12] - [6]) / 6 [10] Equals [6] + ([12] - [6]) / 6

<sup>[11]</sup> Equals [6] + ([12] - [6]) / 6

<sup>[12]</sup> Source: Federal Reserve Bank of St. Louis; Energy Information Administration
[13] Equals internal rate of return of cash flows resulting from Excel's goal seek function

#### Multi-Stage Discounted Cash Flow Model 90 Day Average Stock Price **High Growth Rate**

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
					Yahoo		<u>.</u>		Seco	nd Stage Gr	owth		_	
		Indicated	Weighted-	Zacks	Finance	Value Line								
		Annual	Average	Earnings	Earnings	Earnings	First Stage						Third Stage	
Company	Ticker	Dividend	Stock Price	Growth	Growth	Growth	Growth	Year 6	Year 7	Year 8	Year 9	Year 10	Growth	ROE
Atmos Energy	ATO	\$2.65	\$94.25	7.30%	7.17%	7.00%	7.30%	7.00%	6.70%	6.39%	6.09%	5.79%	5.49%	8.91%
Chesapeake Utilities	CPK	\$1.96	\$111.79	NA	4.74%	8.50%	8.50%	8.00%	7.50%	6.99%	6.49%	5.99%	5.49%	7.78%
NiSource Inc.	NI	\$0.88	\$23.87	6.40%	3.52%	9.50%	9.50%	8.83%	8.16%	7.49%	6.83%	6.16%	5.49%	10.63%
New Jersey Resources	NJR	\$1.33	\$39.82	7.10%	6.00%	2.00%	7.10%	6.83%	6.56%	6.29%	6.03%	5.76%	5.49%	9.52%
Northwest Natural	NWN	\$1.92	\$49.62	3.90%	3.80%	5.50%	5.50%	5.50%	5.50%	5.49%	5.49%	5.49%	5.49%	9.74%
ONE Gas Inc.	OGS	\$2.40	\$74.44	5.00%	5.00%	6.00%	6.00%	5.91%	5.83%	5.74%	5.66%	5.57%	5.49%	9.12%
South Jersey Inds.	SJI	\$1.28	\$23.91	5.40%	4.90%	11.50%	11.50%	10.50%	9.50%	8.49%	7.49%	6.49%	5.49%	13.82%
Spire Inc.	SR	\$2.66	\$70.15	5.50%	7.31%	10.00%	10.00%	9.25%	8.50%	7.74%	6.99%	6.24%	5.49%	10.94%
Southwest Gas	SWX	\$2.42	\$66.26	5.50%	4.00%	9.00%	9.00%	8.41%	7.83%	7.24%	6.66%	6.07%	5.49%	10.44%
													Mean	10.10%
													Median	9.74%
													Max	13.82%
													Min	7.78%

<sup>[1]</sup> Source: Value Line

<sup>[2]</sup> Source: Yahoo Finance, as of May 25, 2021

<sup>[3]</sup> Source: Zacks

<sup>[4]</sup> Source: Yahoo Finance

<sup>[5]</sup> Source: Value Line

<sup>[6]</sup> Equals maximum ([3], [4], [5]) [7] Equals [6] + ([12] - [6]) / 6 [8] Equals [6] + ([12] - [6]) / 6 [9] Equals [6] + ([12] - [6]) / 6 [10] Equals [6] + ([12] - [6]) / 6

<sup>[11]</sup> Equals [6] + ([12] - [6]) / 6

<sup>[12]</sup> Source: Federal Reserve Bank of St. Louis; Energy Information Administration
[13] Equals internal rate of return of cash flows resulting from Excel's goal seek function

#### Multi-Stage Discounted Cash Flow Model 180 Day Average Stock Price Low Growth Rate

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
					Yahoo		-		Seco	nd Stage Gr	owth		_	
		Indicated	Weighted-	Zacks	Finance	Value Line								
		Annual	Average	Earnings	Earnings	Earnings	First Stage						Third Stage	
Company	Ticker	Dividend	Stock Price	Growth	Growth	Growth	Growth	Year 6	Year 7	Year 8	Year 9	Year 10	Growth	ROE
Atmos Energy	ATO	\$2.65	\$94.89	7.30%	7.17%	7.00%	7.00%	6.75%	6.50%	6.24%	5.99%	5.74%	5.49%	8.83%
Chesapeake Utilities	CPK	\$1.96	\$97.62	NA	4.74%	8.50%	4.74%	4.86%	4.99%	5.11%	5.24%	5.36%	5.49%	7.55%
NiSource Inc.	NI	\$0.88	\$23.47	6.40%	3.52%	9.50%	3.52%	3.85%	4.18%	4.50%	4.83%	5.16%	5.49%	9.11%
New Jersey Resources	NJR	\$1.33	\$35.75	7.10%	6.00%	2.00%	2.00%	2.58%	3.16%	3.74%	4.33%	4.91%	5.49%	8.74%
Northwest Natural	NWN	\$1.92	\$48.33	3.90%	3.80%	5.50%	3.80%	4.08%	4.36%	4.64%	4.93%	5.21%	5.49%	9.41%
ONE Gas Inc.	OGS	\$2.40	\$74.23	5.00%	5.00%	6.00%	5.00%	5.08%	5.16%	5.24%	5.33%	5.41%	5.49%	8.91%
South Jersey Inds.	SJI	\$1.28	\$22.98	5.40%	4.90%	11.50%	4.90%	5.00%	5.10%	5.19%	5.29%	5.39%	5.49%	11.50%
Spire Inc.	SR	\$2.66	\$64.87	5.50%	7.31%	10.00%	5.50%	5.50%	5.50%	5.49%	5.49%	5.49%	5.49%	10.00%
Southwest Gas	SWX	\$2.42	\$65.36	5.50%	4.00%	9.00%	4.00%	4.25%	4.50%	4.74%	4.99%	5.24%	5.49%	9.18%
													Mean	9.25%
													Median	9.11%
													Max	11.50%
													Min	7.55%

<sup>[1]</sup> Source: Value Line

<sup>[2]</sup> Source: Yahoo Finance, as of May 25, 2021

<sup>[3]</sup> Source: Zacks

<sup>[4]</sup> Source: Yahoo Finance

<sup>[5]</sup> Source: Value Line

<sup>[6]</sup> Equals minimum ([3], [4], [5]) [7] Equals [6] + ([12] - [6]) / 6 [8] Equals [6] + ([12] - [6]) / 6 [9] Equals [6] + ([12] - [6]) / 6 [10] Equals [6] + ([12] - [6]) / 6

<sup>[11]</sup> Equals [6] + ([12] - [6]) / 6

<sup>[12]</sup> Source: Federal Reserve Bank of St. Louis; Energy Information Administration
[13] Equals internal rate of return of cash flows resulting from Excel's goal seek function

#### Multi-Stage Discounted Cash Flow Model 180 Day Average Stock Price Average Growth Rate

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
					Yahoo		_		Seco	nd Stage Gr	owth		_	
		Indicated	Weighted-	Zacks	Finance	Value Line								
		Annual	Average	Earnings	Earnings	Earnings	First Stage						Third Stage	
Company	Ticker	Dividend	Stock Price	Growth	Growth	Growth	Growth	Year 6	Year 7	Year 8	Year 9	Year 10	Growth	ROE
Atmos Energy	ATO	\$2.65	\$94.89	7.30%	7.17%	7.00%	7.16%	6.88%	6.60%	6.32%	6.05%	5.77%	5.49%	8.86%
Chesapeake Utilities	CPK	\$1.96	\$97.62	NA	4.74%	8.50%	6.62%	6.43%	6.24%	6.05%	5.87%	5.68%	5.49%	7.82%
NiSource Inc.	NI	\$0.88	\$23.47	6.40%	3.52%	9.50%	6.47%	6.31%	6.15%	5.98%	5.82%	5.65%	5.49%	9.86%
New Jersey Resources	NJR	\$1.33	\$35.75	7.10%	6.00%	2.00%	5.03%	5.11%	5.19%	5.26%	5.34%	5.41%	5.49%	9.45%
Northwest Natural	NWN	\$1.92	\$48.33	3.90%	3.80%	5.50%	4.40%	4.58%	4.76%	4.94%	5.13%	5.31%	5.49%	9.57%
ONE Gas Inc.	OGS	\$2.40	\$74.23	5.00%	5.00%	6.00%	5.33%	5.36%	5.39%	5.41%	5.44%	5.46%	5.49%	8.98%
South Jersey Inds.	SJI	\$1.28	\$22.98	5.40%	4.90%	11.50%	7.27%	6.97%	6.67%	6.38%	6.08%	5.79%	5.49%	12.39%
Spire Inc.	SR	\$2.66	\$64.87	5.50%	7.31%	10.00%	7.60%	7.25%	6.90%	6.55%	6.19%	5.84%	5.49%	10.62%
Southwest Gas	SWX	\$2.42	\$65.36	5.50%	4.00%	9.00%	6.17%	6.05%	5.94%	5.83%	5.72%	5.60%	5.49%	9.72%
													Mean	9.69%
													Median	9.57%
													Max	12.39%
													Min	7.82%

<sup>[1]</sup> Source: Value Line

<sup>[2]</sup> Source: Yahoo Finance, as of May 25, 2021

<sup>[3]</sup> Source: Zacks

<sup>[4]</sup> Source: Yahoo Finance

<sup>[5]</sup> Source: Value Line

<sup>[3]</sup> Source: Value Line [6] Equals average ([3], [4], [5]) [7] Equals [6] + ([12] - [6]) / 6 [8] Equals [6] + ([12] - [6]) / 6 [9] Equals [6] + ([12] - [6]) / 6 [10] Equals [6] + ([12] - [6]) / 6

<sup>[11]</sup> Equals [6] + ([12] - [6]) / 6

<sup>[12]</sup> Source: Federal Reserve Bank of St. Louis; Energy Information Administration [13] Equals internal rate of return of cash flows resulting from Excel's goal seek function

#### Multi-Stage Discounted Cash Flow Model 180 Day Average Stock Price **High Growth Rate**

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
					Yahoo		<u>-</u>		Seco	nd Stage Gr	owth		_	
		Indicated	Weighted-	Zacks	Finance	Value Line								
		Annual	Average	Earnings	Earnings	Earnings	First Stage						Third Stage	
Company	Ticker	Dividend	Stock Price	Growth	Growth	Growth	Growth	Year 6	Year 7	Year 8	Year 9	Year 10	Growth	ROE
Atmos Energy	ATO	\$2.65	\$94.89	7.30%	7.17%	7.00%	7.30%	7.00%	6.70%	6.39%	6.09%	5.79%	5.49%	8.89%
Chesapeake Utilities	CPK	\$1.96	\$97.62	NA	4.74%	8.50%	8.50%	8.00%	7.50%	6.99%	6.49%	5.99%	5.49%	8.12%
NiSource Inc.	NI	\$0.88	\$23.47	6.40%	3.52%	9.50%	9.50%	8.83%	8.16%	7.49%	6.83%	6.16%	5.49%	10.72%
New Jersey Resources	NJR	\$1.33	\$35.75	7.10%	6.00%	2.00%	7.10%	6.83%	6.56%	6.29%	6.03%	5.76%	5.49%	9.99%
Northwest Natural	NWN	\$1.92	\$48.33	3.90%	3.80%	5.50%	5.50%	5.50%	5.50%	5.49%	5.49%	5.49%	5.49%	9.86%
ONE Gas Inc.	OGS	\$2.40	\$74.23	5.00%	5.00%	6.00%	6.00%	5.91%	5.83%	5.74%	5.66%	5.57%	5.49%	9.13%
South Jersey Inds.	SJI	\$1.28	\$22.98	5.40%	4.90%	11.50%	11.50%	10.50%	9.50%	8.49%	7.49%	6.49%	5.49%	14.15%
Spire Inc.	SR	\$2.66	\$64.87	5.50%	7.31%	10.00%	10.00%	9.25%	8.50%	7.74%	6.99%	6.24%	5.49%	11.38%
Southwest Gas	SWX	\$2.42	\$65.36	5.50%	4.00%	9.00%	9.00%	8.41%	7.83%	7.24%	6.66%	6.07%	5.49%	10.51%
													Mean	10.31%
													Median	9.99%
													Max	14.15%
													Min	8.12%

<sup>[1]</sup> Source: Value Line

<sup>[2]</sup> Source: Yahoo Finance, as of May 25, 2021

<sup>[3]</sup> Source: Zacks

<sup>[4]</sup> Source: Yahoo Finance

<sup>[5]</sup> Source: Value Line

<sup>[5]</sup> Source: Value Line [6] Equals maximum ([3], [4], [5]) [7] Equals [6] + ([12] - [6]) / 6 [8] Equals [6] + ([12] - [6]) / 6 [9] Equals [6] + ([12] - [6]) / 6 [10] Equals [6] + ([12] - [6]) / 6 [11] Equals [6] + ([12] - [6]) / 6

<sup>[12]</sup> Source: Federal Reserve Bank of St. Louis; Energy Information Administration
[13] Equals internal rate of return of cash flows resulting from Excel's goal seek function

# **Proxy Group Betas**

[1]

Company Name	Stock Ticker	Beta
Atmos Energy	ATO	0.80
Chesapeake Utilities	СРК	0.80
NiSource Inc.	NI	0.85
New Jersey Resources	NJR	1.00
Northwest Natural	NWN	0.85
ONE Gas Inc.	OGS	0.80
South Jersey Inds.	SJI	1.05
Spire Inc.	SR	0.85
Southwest Gas	SWX	0.95
Mean		0.88

[1] Source: Value Line

## Market Risk Premium Derived from Value Line Long-Term Growth Estimates

[1] S&P 500 Estimated Required Market Return 14.02%

### S&P 500 Index

Company			[2]	[3]	[4]	[5]	[6]	[7]
Agilent Technologies	Company	Ticker	Market Capitalization	Weight in	Dividend Vield	Long-Term	DCE Result	Weighted DCF
Amer. Arlines         AAL         14/32/40         0.04%         0.00%         0.00%         0.00%         0.00%         0.00%         0.008%         0.00%         0.004%         0.00%         0.004%         0.00%         0.004%         1.10%         0.004%         1.10%         0.004%         1.10%         0.004%         1.14%         0.005%         0.009%         0.00%         1.14%         0.005%         0.00%         1.14%         0.005%         0.00%         1.14%         0.005%         0.00%         1.15%         1.15%         1.114%         0.0033%         0.00%         1.00%         1.00%         0.0033%         0.00%         1.15%								
Apple Inc.         APPL         2,080,615.40         5.47%         0.71%         14.50%         15.26%         0.8354%           AbbVier Inc.         ABSV         204,552.10         0.54%         4.49%         6.50%         11.14%         0.0599%           AmerisourceBergen         ABC         2,249.80         0.06%         1.00%         10.00%	•							
Abbve Inc.  ABBV 204,552.10 0.54% 4.49% 6.50% 1.1.14% 0.0599% AmericancePergen ABC 24,249.80 0.06% 1.52% 7.00% 8.57% 0.0055% ABIOMED Inc.  ABMD 12,390.70 0.03% 0.00% 10.00% 10.00% 10.00% 0.0033% Abbbet 1.185% 1.15% 11.14% 0.0715% ACCENTURE PIC ACN 178,744.10 0.47% 1.35% 19.50% 10.14% 0.0715% ACCENTURE PIC ACN 178,744.10 0.47% 1.35% 19.50% 10.91% 0.0513% ACCENTURE PIC ACN 178,744.10 0.47% 1.35% 19.50% 10.91% 0.0513% ACCENTURE PIC ACN 178,744.10 0.47% 1.35% 19.50% 10.91% 0.0513% ACCENTURE PIC ACN 178,744.10 0.47% 1.35% 19.50% 10.99% 0.0678% Analog Devices ADI 56,474.80 0.15% 1.80% 8.50% 10.38% 0.0154% Archer Daniels Midfl ADM 37,134.40 0.15% 1.80% 8.50% 10.38% 0.0154% Automatic Data Proc.  ADP 81,973.80 0.15% 0.00% 18.00% 18.00% 18.00% 0.0056% Automatic Data Proc.  ADP 81,973.80 0.15% 0.00% 18.00% 18.00% 18.00% 0.0285% Ameren Corp.  AEE 121,515.70 0.06% 2.66% 6.00% 8.74% 0.0038% ARCHER Proc.  AFE 21,515.70 0.06% 2.66% 6.00% 8.74% 0.0015% ABC 0.0078 ARCHER PROC.  AFE 31,616.40 0.04% 2.41% 21.50% 24.17% 0.0115% AES Corp.  AES 16,616.40 0.04% 2.41% 21.50% 9.24.17% 0.0106% ARCHER PROC.  ARGE INTERFERENCE AND ARCHER PROC.  ARGE 1816 ARCHER PROC.  ARCHER PROC.  ARGE 1816 ARCHER PROC.  ARCHER PROC.  ARGE 1816 ARCHER PROC.  ARCHER	Advance Auto Parts	AAP	12,912.50	0.03%	2.06%	11.00%	13.17%	0.0045%
American Free (a) ABIO (a) ABIO (b) (b) (c) ABIO (b) (c) (c) ABIO (b) (c) (c) ABIO (c)	Apple Inc.	AAPL	2,080,615.40	5.47%	0.71%	14.50%	15.26%	0.8354%
ABIOMED Inc.	AbbVie Inc.	ABBV	204,552.10	0.54%	4.49%		11.14%	0.0599%
Abbott labs.  ABT 266,786.30 0.54% 1.55% 11.50% 13.14% 0.075% 1.0051% Adobe Inc.  ACCenture Pic ACN 178,744.10 0.47% 1.35% 9.50% 1.015% 0.063% Adobe Inc.  ADBE 230,145.10 0.61% 0.00% 14.50% 14.50% 10.00878% Analog Devices ADI 56.474.80 0.15% 1.80% 8.50% 10.38% 0.015% Archer Daniels Midfd ADM 37,134.40 0.15% 1.80% 8.50% 10.83% 0.015% Archer Daniels Midfd ADM 37,134.40 0.15% 1.80% 8.50% 10.83% 0.015% Archer Daniels Midfd ADM 37,134.40 0.10% 2.29% 7.50% 9.88% 0.0096% Automatic Data Proc.  ADP ALLOMATIC ADD 2.29% 7.50% 9.88% 0.0058% Automatic Data Proc.  ADSK 60,163.80 0.16% 0.00% 18.00% 18.00% 0.0285% Amer. Elec. Power AEP 42,895.20 0.11% 3.54% 6.50% 10.16% 0.0015% AES Corp.  AES Corp.  AES 16,616.40 0.04% 2.41% 21.50% 2.41% 0.0049% Allac Inc.  AFL 38,611.20 0.10% 2.44% 7.00% 9.53% 0.0097% Assurant Inc.  ARE: Inc.  AZ 9,105.60 0.02% 1.68% 14.00% 15.80% 0.0038% Gallagher (Arthur J.)  Als Albemaric Corp.  Alkam 18,437.00 0.05% 0.00% 9.50% 9.50% 0.000% 0.000% 1.88% 0.00038% Gallagher (Arthur J.)  Alkamal Technologies AkAM 18,437.00 0.05% 0.00% 9.50% 9.50% 0.0046% Allaer factor.  Alse Mark Group Alk 8,225.40 0.12% 0.00% 23.00% 23.00% 0.0074% Allasha Air Group Alk 8,225.40 0.15% 0.05% 0.00% 1.50% 1.50% 1.30% 0.001019% Allaer factor.  Alkama 16 Corp.  AlL 41,29.80 0.15% 0.00% 1.50% 0.00% 1.950% 0.009% 0.009% 0.009% Allagn Techn.  Alkasha Air Group Alk 8,225.40 0.12% 0.00% 1.50% 0.00% 1.950% 0.009% 0.009% 0.009% 0.009% 0.0000% 0.000% 0.000% 0.000% 0.000% 0.000% 0.000% 0.000% 0.000% 0.0000% 0.0000% 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.000000	•							
Accenture Pic ACN 178,744-10 0.47% 1.35% 9.50% 10.91% 0.0513k Adobe Inc. ADBE 230,145-10 0.61% 0.61% 0.00% 14.50% 14.50% 14.50% 0.0678% 1.00% 0.0078 Analog Devices ADI 56,474.80 0.15% 1.80% 8.50% 10.38% 0.056% Archer Daniels Midfl'd ADM 37,134-40 0.10% 2.29% 7.50% 9.878 0.0054 Automatic Data Proc. ADP 81,297.80 0.21% 2.05% 9.00% 11.14% 0.0238% Automatic Data Proc. ADP 81,297.80 0.15% 0.00% 18.00% 18.00% 10.0038 Automatic Data Proc. ADSK 60,163.80 0.16% 0.05% 2.66% 6.00% 8.74% 0.0049% Amore Corp. AEE 21,515.70 0.06% 2.66% 6.00% 8.74% 0.0049% AEE 21,515.70 0.05% 2.66% 6.00% 8.74% 0.0049% AEE 21,515.70 0.11% 2.60% 0.00% 18.00% 18.00% 18.00% 10.00% ABC 60.00% 18.74% 0.0049% AEE 21,515.70 0.11% 2.60% 0.00% 2.66% 6.00% 8.74% 0.0049% AEE 21,515.70 0.11% 2.60% 0.00% 2.66% 6.00% 8.74% 0.0049% AEE 21,515.70 0.11% 2.60% 0.00% 2.60% 0.00% 2.66% 6.00% 8.74% 0.0016% AEE 21,515.70 0.11% 2.60% 0.00% 2.66% 6.00% 8.74% 0.0016% AEE 21,515.70 0.11% 2.60% 0.00% 2.41% 0.0016% AEE 21,515.70 0.10% 2.41% 0.0016% AEE 21,515.70 0.10% 2.41% 0.0016% AEE 21,515.70 0.10% 2.44% 7.00% 9.53% 0.0097% AEE 21,515.70 0.10% 2.44% 7.00% 9.53% 0.0097% AEE 21,515.70 0.10% 2.44% 7.00% 9.53% 0.0097% AEE 21,515.70 0.00% 2.44% 7.00% 9.53% 0.0097% AEE 21,515.70 0.00% 2.44% 7.00% 9.53% 0.0009% AEE 21,515.70 0.00% 2.55% 0.00% 0.00% 9.50% 0.000% 9.50% 0.000% 9.50% 0.000% AEE 21,515.70 0.00% 2.55% 0.000% 0.00% 9.50% 0.000% 2.50% 0.000% AEE 21,515.70 0.005% AEE 21,								
Adobe Inc.         ADBE         230,145.10         0.61%         1.80%         1.45.50%         1.03.78%           Analog Devices         ADI         56,474.80         0.15%         1.80%         8.50%         1.03.8%         0.015%           Automatic Date Proc.         ADP         31,234.90         0.15%         2.29%         7.50%         9.88%         0.0096%           Automatic Date Proc.         ADP         31,237.80         0.21%         2.29%         7.50%         9.88%         0.0096%           Autotack Inc.         ADS         60,163.80         0.15%         0.00%         1.800%         10.0285%           Amer Bele, Power         AEP         42,895.20         0.11%         3.54%         6,50%         1.016%         0.0115%           Afficinc.         AFI         38,611.20         0.10%         2.44%         7.00%         9.53%         0.0097%           Almer, Int'l Group         AIG         43,655.10         0.11%         2.53%         28,50%         31,39%         0.0038%           Almer, Int'l Group         AIG         43,655.10         0.11%         2.53%         28,50%         0.0038%           Almari Tare, Internologies         AKAM         18,327.20         0.07%         1.25% </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
Analog Devices ADI 56,474.80 0.15% 1.80% 8.50% 10.38% 0.0054% Archer Daniels Midl'd ADM 37,134.40 0.15% 2.29% 7.50% 9.88% 0.0096% Automatic Data Proc. ADP 81,297.80 0.21% 2.05% 9.00% 11.14% 0.0238% Automatic Data Proc. ADP 81,297.80 0.12% 2.05% 9.00% 11.14% 0.0238% Automatic Data Proc. ADS M. Control 1.55.70 0.06% 2.66% 6.00% 8.74% 0.0049% Amore Tele. Prover AEP 24,895.20 0.11% 3.54% 6.50% 10.16% 0.015% AES Corp. AES 16,616.40 0.04% 2.41% 21,50% 24,17% 0.016% AES Corp. AES 16,616.40 0.04% 2.41% 21,50% 24,17% 0.016% AES Corp. AFS 16,616.40 0.04% 2.41% 21,50% 24,17% 0.006% AMB AES CORP. AFS 16,616.40 0.04% 2.41% 21,50% 24,17% 0.006% ABS CORP. AMB ARITH GROUP AIG 43,655.10 0.11% 2.53% 28,50% 31,39% 0.0097% Amer Int'l Group AIG 43,655.10 0.11% 2.53% 28,50% 31,39% 0.00318% ABS CORP. ALL BERNOON AMB ARITH GROUP AIG 43,655.10 0.11% 2.53% 28,50% 31,39% 0.00318% ARAM 18,837.00 0.05% 0.00% 59,50% 59,50% 0.0046% Albemaric Corp. ALB 18,322.40 0.05% 0.09% 6.50% 13,50% 0.0046% Albemaric Corp. ALB 18,322.40 0.05% 0.99% 6.50% 7.52% 0.0036% Allging Techn. ALG N. 42,225.40 0.12% 0.00% 7.75.50% 0.005% Alaska Air Group AIK 8,627.60 0.12% 0.00% 7.75.50% 0.005% Alaska Air Group AIK 8,627.60 0.12% 0.00% 7.75.50% 0.0036% Alaska Air Group AIK 8,627.60 0.12% 0.00% 7.75.50% 0.0036% Alaska Air Group AIK 8,627.60 0.13% 2.39% 8.50% 10.0036% Alaska Air Group AIK 8,627.60 0.00% 1.05% 0.00% 7.75.50% 0.0036% Alaska Air Group AIK 8,627.60 0.00% 1.05% 0.00% 7.75.50% 0.0036% Alaska Air Group AIK 8,627.60 0.00% 1.05% 0.00% 7.75.50% 0.0036% Alaska Air Group AIK 8,627.60 0.00% 1.05% 0.00% 7.75.50% 0.0036% Alaska Air Group AIK 8,627.60 0.00% 1.05% 0.00% 7.75.50% 0.0036% Alaska Air Group AIK 8,627.60 0.00% 1.05% 0.00% 1.05% 0.00% 1.00% 0.00% 1.00% 0.00								
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Ameren Corp.         AEE         21,515.70         0.06%         2.66%         6.00%         8.74%         0.0049%           Amor. Flee, Power         AFP         42,885.20         0.11%         3.54%         6.50%         1.016%         0.0116%           AES Corp.         AES         1.6616.40         0.04%         2.41%         2.150%         2.417%         0.0106%           ARIS Corp.         AFL         38,611.20         0.11%         2.23%         28,50%         9.53%         0.009%           Amer. Int'l Group         AIG         43,655.10         0.11%         2.25%         28,50%         31.39%         0.0361%           Assurant Inc.         AIZ         9,105.60         0.02%         1.66%         14.00%         18.80%         0.0008%           Assurant Inc.         AIZ         9,105.60         0.05%         0.00%         9.50%         0.0046%           Akamal Technologies         AKAM         18,437.00         0.05%         0.00%         9.50%         0.00%           Akiga Techn.         ALIG         41,5225.40         0.02%         0.00%         23.00%         23.00%         0.0074%           Aliegion pic         ALLE         12,398.00         0.03%         2.50%								
Amer. Rick. Power  AFP  AFS COrp.  AFF CORP.  AFS CORP.								
Affac Inc.         AFL         38,611.20         0.10%         2.44%         7.00%         9.53%         0.0097%           Amer. Int'l Group         AIG         43,655.10         0.11%         2.53%         2.03%         31.39%         0.0361%           Assurant Inc.         AIZ         9.105.60         0.02%         1.68%         14.00%         15.80%         0.0033%           Gallagher (Arthur J.)         AIG         28,481.90         0.07%         1.32%         12.50%         13.90%         0.0104%           Akamal Technologies         AKAM         18.437.00         0.05%         0.00%         9.50%         0.0046%           Albernarie Corp.         ALB         18.322.40         0.00%         9.99%         6.50%         7.52%         0.0036%           Alsaka Air Group         ALK         8.627.60         0.02%         0.00%         77.50%         77.50%         0.0176%           Allsate Corp.         ALL         41.2396.10         0.03%         1.05%         8.50%         9.59%         0.0013%           Allegion plc         ALLE         12.396.10         0.03%         1.05%         8.50%         9.59%         0.0031%           Alexion Pharmac.         ALVN         38,761.30	•	AEP		0.11%	3.54%	6.50%	10.16%	
Amer. Int'I Group         AIG         43,555.10         0.11%         2.53%         28,50%         31,39%         0.038%           Gallagher (Arthur J.)         AJG         28,481.90         0.07%         1.32%         12,50%         15,80%         0.0038%           Gallagher (Arthur J.)         AJG         28,481.90         0.07%         1.32%         12,50%         13,90%         0.0104%           Akamal Technologies         AKAM         18,327.40         0.05%         0.99%         6.50%         7.57%         0.0036%           Aliga Techn.         ALGN         45,225.40         0.012%         0.00%         23,00%         23,00%         0.0274%           Aliga Techn.         ALL         41,249.80         0.11%         2.39%         8.50%         10.99%         0.011%           Allstate Corp.         ALL         11,249.80         0.11%         2.39%         8.50%         10.99%         0.011%           Allegion plc         ALL         12,398.01         0.03%         1.55%         8.50%         10.99%         0.011%           Allegion plc         AMAT         114,642.10         0.30%         0.77%         115.00%         19.50%         19.50%         0.95%         0.019%           Aph	AES Corp.	AES	16,616.40	0.04%	2.41%	21.50%	24.17%	0.0106%
Assurant Inc.  AIZ 9,105,60 0,00% 1,68% 14,00% 13,90% 0,01048 Alamai Technologies AKAM 18,437,00 0,05% 0,00% 1,95% 0,50% 13,90% 0,0046% Albemarie Corp. ALB 18,322.40 0,05% 0,09% 1,50% 1,50% 1,50% 0,006% 1,50% 1,50% 1,50% 0,0074 Alaska Air Group ALK 18,627,50 0,00% 1,00% 1,50% 1,50% 1,50% 1,00% 1,50% 1,50% 1,50% 1,00% 1,50%	Aflac Inc.	AFL	38,611.20	0.10%	2.44%	7.00%	9.53%	0.0097%
Gallagher (Arthur J.) AIG	Amer. Int'l Group	AIG	43,655.10	0.11%	2.53%	28.50%	31.39%	0.0361%
Akamai Technologies         AKAM         18,437.00         0.00%         9.50%         9.50%         0.0046%           Albemarle Corp.         ALB         18,322.40         0.05%         0.99%         6.50%         7.52%         0.0036%           Allaska Forup         ALK         8,627.60         0.02%         0.00%         77.50%         77.50%         0.0176%           Allstate Corp.         ALL         41,249.80         0.11%         2.30%         8.50%         9.59%         0.0013%           Allegion plc         ALLE         12,396.10         0.03%         1.05%         8.50%         9.59%         0.0013%           Alexion Pharmac.         ALXN         38,761.30         0.10%         0.00%         19.50%         19.50%         0.033%           Applied Materials         AMAT         114,524.10         0.30%         0.77%         11.50%         12.31%         0.0371%           Amcor plc         AMC         19,444.20         0.05%         3.91%         0.00%         3.91%         0.00%         3.91%         0.008         4.008         3.91%         0.00%         3.91%         0.00%         4.50%         0.0585%         Amger         AMGEREK Inc.         AME         30,372.80         0.08%	Assurant Inc.		9,105.60	0.02%	1.68%	14.00%	15.80%	0.0038%
Albemarle Corp.  AlB 18,322,40 0,05% 0,99% 6,50% 7,52% 0,0036% Align Techn.  ALGN 45,225,40 0,12% 0,00% 23,00% 23,00% 0,0074% Alsxa Air Group ALK 8,627,60 0,02% 0,00% 77.50% 77.50% 0,0176% Allstate Corp.  ALL 12,396,10 0,03% 1,05% 8,50% 19,59% 0,0031% Allegion pic ALLE 12,396,10 0,03% 1,05% 8,50% 19,59% 0,0031% Alexion Pharmac.  ALXN 38,761,30 0,10% 0,00% 19,50% 19,50% 0,0139% Alphied Materials AMAT 11,524,10 0,30% 0,77% 11,50% 12,31% 0,0371% Amcor plc AMCR 19,444,20 0,05% 3,91% 0,00% 3,91% 0,002% Advanced Micro Dev.  AMMD 92,619,40 0,24% 0,00% 24,00% 24,00% 0,0585% Amgen AMGN 143,036,80 0,38% 2,91% 5,50% 8,49% 0,0319% Ameriprise fin'l AMP 29,259,10 0,08% 0,61% 1,00% 14,91% 0,0015% Ameriprise Fin'l AMP 29,259,10 0,08% 1,19% 0,00% 14,91% 0,0015% Amerancom AMZN 1,628,827,10 4,29% 0,00% 28,50% 28,50% 1,2212% Arista Networks ANET 24,674,50 0,06% 0,00% 28,50% 28,50% 1,2212% Anthem Inc.  ANTM 9,366,40 0,25% 1,15% 0,00% 11,15% 0,0029% ANSYS Inc.  ANSS 28,449,70 0,07% 0,00% 8,00% 8,00% 8,00% Anthem Inc.  ANTM 9,366,40 0,25% 1,15% 1,000% 11,15% 0,00284 An plc AON 57,054,40 0,15% 0,81% 7,00% 7,84% 0,018% Smith (A.O.) AOS 11,010,50 0,33% 2,70% 7,00% 9,92% 0,0039% AFA Corp.  APA Corp.  APA 7,859,20 0,02% 0,48% 4,700% 47,59% 0,009% AFR Corp.  APA 7,859,20 0,00% 1,55% 1,50% 1,43% 0,0029% AFR Scorp.  APA 7,859,20 0,00% 1,55% 1,50% 1,43% 0,0029% AFR Corp.  APA 7,859,20 0,00% 0,00% 1,550% 11,63% 0,0039% AFR Corp.  APA 7,859,20 0,00% 0,00% 1,550% 11,63% 0,0039% AFI Products & Chem.  APD 66,011,30 0,17% 2,01% 1,200% 1,413% 0,0025% ATH Products & Chem.  APD 66,011,30 0,17% 2,01% 1,200% 1,550% 1,550% 0,0039% AFR Corp.  APA 7,859,20 0,00% 0,00% 1,550% 11,50% 0,0039% AFR Corp.  APA 7,859,20 0,00% 0,00% 1,550% 11,50% 0,0039% AFR Corp.  APA 7,859,20 0,00% 0,00% 1,550% 11,50% 0,0039% AFR Corp.  APA 7,859,20 0,00% 0,00% 1,550% 11,00% 1,003% 0,0039% AFR Estate ARE 19,124,00 0,00% 1,550% 11,00% 1,550% 0,0039% AFR Corp.  APA 7,859,20 0,00% 0,00% 1,550% 11,00% 1,005% 0,0059% AFR Corp.  APA 7,859,00 0,00% 0,00% 0,00% 0,00% 0,00% 0,0039% AFR C	• , ,							0.0104%
Align Techn.         ALGN         45,225,40         0,12%         0,00%         23,00%         23,00%         0,0274%           Alaska Air Group         ALL         8,627,60         0,02%         0,00%         77,50%         0,0176%           Allstate Corp.         ALL         41,249,80         0,11%         2,39%         8,50%         10,99%         0,0119%           Allegion pic         ALE         12,396,10         0,03%         1,05%         8,50%         9,59%         0,0031%           Applied Materials         AMAT         114,524,10         0,30%         0,77%         11,50%         12,31%         0,0371%           Amcor plc         AMCR         19,444,20         0.05%         3,91%         0,00%         3,91%         0,0020%           AMTEK Inc.         AME         30,372,80         0.08%         0,61%         10,00%         24,00%         0,008%           Amerins Finl         AMP         29,259,10         0,83%         1,79%         13,00%         14,91%         0,0115%           Amerins Finl         AMP         29,259,10         0,83%         1,91%         13,00%         14,91%         0,0115%           Amerins Finl         AMP         29,259,10         0,284% <t< td=""><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	•							
Alska Air Group	•							
Alltate Corp.  Allta	•							
Allegion plc         ALLE         12,396.10         0.03%         1.05%         8.50%         9.59%         0.0031%           Alexion Pharmac.         ALXN         38,761.30         0.10%         0.00%         19.50%         19.50%         0.0137%           Applied Materials         AMAT         114,524.10         0.30%         0.77%         11.50%         12.31%         0.0371%           Amoro plc         AMCR         19,444.20         0.05%         3.91%         0.00%         3.91%         0.0020%           Advanced Micro Dev.         AMD         22,619.40         0.08%         0.61%         10.00%         10.64%         0.0085%           Amgen         AMGN         133,036.80         0.38%         0.61%         110.00%         10.64%         0.00319%           Amer, Tower 'A'         AMT         109,436.90         0.29%         2.26%         9.50%         11.87%         0.0342%           Amazon.com         AMZN         1,628.827.10         4.29%         0.00%         28.50%         28.50%         1.2212%           Antsta Networks         ANET         24,674.50         0.06%         0.00%         8.00%         0.0024%           Antysin Lo.         ANSS         28,449.70         0.07%<	'							
Alexion Pharmac.         ALXN         38,761.30         0.10%         0.00%         19.50%         0.0199%           Applied Materials         AMAT         114,524.10         0.30%         0.77%         11.50%         12.31%         0.0371%           Amcor plc         AMCR         19,444.20         0.05%         3.91%         0.00%         24.00%         0.0020%           Advanced Micro Dev.         AMD         92,619.40         0.24%         0.00%         24.00%         0.0885%           AMETEK Inc.         AME         30,372.80         0.08%         0.61%         10.00%         10.64%         0.0085%           Amegon         AMGN         143,036.80         0.38%         2.91%         5.50%         8.49%         0.0319%           Ameriorise Fini         AMP         29,259.10         0.08%         1.79%         13.00%         14.91%         0.0115%           Ameriorise Fini         AMP         29,259.10         0.08%         1.79%         13.00%         11.17%         0.0342%           Ameriorise Fini         AMP         29,259.10         0.08%         1.09%         9.50%         11.18%         0.03115%           Ameriorise Fini         AMP         29,259.10         0.08%         1.00%	•							
Applied Materials         AMAT         114,524.10         0.30%         0.77%         11.50%         12.31%         0.0321%           Amcor plc         AMCR         19,444.20         0.05%         3.91%         0.00%         3.91%         0.0020%           Advanced Micro Dev.         AMD         192,619.40         0.02%         3.91%         0.00%         24.00%         24.00%         0.240         0.0585%           AMET         AMG         13,305.80         0.08%         0.61%         10.00%         10.64%         0.0085%           Amgen         AMG         13,305.80         0.38%         2.91%         5.50%         8.49%         0.0319%           Amer, Tower 'A'         AMT         109,436.90         0.29%         2.26%         9.50%         11.87%         0.0319%           Amazon.com         AMZY         1,628.827.10         4.29%         0.00%         4.50%         4.50%         0.02284           ANSYS Inc.         ANSTS         28,449.70         0.00%         4.50%         4.50%         0.0029%           ANYS Inc.         ANTM         96,366.40         0.25%         1.15%         0.00%         8.00%         0.0066%           Anthemic.         ANTM         96,366.40	• '							
Amcor plc         AMCR         19,444.20         0.05%         3.91%         0.0020%           Advanced Micro Dev.         AMD         92,619.40         0.24%         0.00%         24.00%         24.00%         0.5585%           AMETEK Inc.         AME         30,372.80         0.08%         0.61%         10.00%         10.64%         0.0085%           Amgen         AMGN         143,036.80         0.38%         2.91%         5.50%         8.49%         0.0319%           Ameriprise Fin'l         AMP         29,259.10         0.08%         1.79%         13.00%         14.91%         0.0115%           Ameriprise Fin'l         AMT         109,436.90         0.29%         2.26%         9.50%         11.87%         0.0342%           Amazon.com         AMZN         1,628,827.10         4.29%         0.00%         28.50%         28.50%         1.2212%           Arista Networks         ANET         24,674.50         0.06%         0.00%         45.00%         45.00%         1.2212%           Ansys Inc.         ANS         28,497.70         0.07%         0.00%         8.00%         0.0060%           Antrista Networks         ANET         24,674.50         0.06%         0.015%         0.11%			,					
Advanced Micro Dev.         AMD         92,619,40         0.24%         0.00%         24,00%         24,00%         0.0585%           AMETEK Inc.         AME         30,372,80         0.08%         0.61%         10.00%         10.64%         0.0085%           Amgen         AMGN         143,036.80         0.38%         2.91%         5.50%         8.49%         0.0319%           Ameriprise Fin'l         AMP         29,259.10         0.08%         1.79%         13.00%         14,91%         0.0115%           Amer. Tower 'A'         AMT         109,436.90         0.29%         2.26%         9.50%         11.87%         0.0342%           Arista Networks         ANET         24,674.50         0.06%         0.00%         28.50%         4.50%         0.0029%           ANSYS Inc.         ANSS         28,449.70         0.07%         0.00%         8.00%         0.0029%           ANSYS Inc.         ANSS         28,449.70         0.07%         0.00%         8.50%         4.50%         0.0029%           ANTER Inc.         ANTM         96,366.40         0.25%         1.15%         10.00%         11.21%         0.0224%           Aon pla         43,07         0.00%         8.50%         4.50%<	• • • • • • • • • • • • • • • • • • • •		,					
Amgen         AMGN         143,036.80         0.38%         2.91%         5.50%         8.49%         0.0319%           Ameriprise Fin'l         AMP         29,259.10         0.08%         1.79%         13.00%         11.91%         0.0115%           Amer. Tower 'A'         AMT         109,436.90         0.29%         2.26%         9.50%         11.87%         0.0342%           Amzon.com         AMZN         1,628,827.10         4.29%         0.00%         28.50%         28.50%         1.2212%           Arista Networks         ANET         24,674.50         0.06%         0.00%         8.00%         4.00%         0.006%           ANSYS Inc.         ANS         28,449.70         0.07%         0.00%         8.00%         4.0060           Anthem Inc.         ANTM         96,366.40         0.25%         1.15%         10.00%         11.21%         0.0284%           Ano pic         AON         57,054.40         0.15%         0.81%         7.00%         7.84%         0.0118%           Smith (A.O.)         AOS         11,010.50         0.03%         1.52%         8.50%         10.08%         0.029%           APP Corp.         APA         7,859.20         0.02%         0.48%	•	AMD		0.24%	0.00%	24.00%	24.00%	0.0585%
Ameriprise Fin'l Amer Tower 'A'         AMT         19,436.90         0.29%         1.79%         13.00%         14.91%         0.0115%           Amer. Tower 'A'         AMT         10,9436.90         0.29%         2.26%         9.50%         11.87%         0.0342%           Amazon.com         ANZN         1,628,827.10         4.29%         0.00%         28.50%         22.212%           Arista Networks         ANET         24,674.50         0.06%         0.00%         4.50%         4.50%         0.0029%           ANSYS inc.         ANSS         28,449.70         0.07%         0.00%         8.00%         0.0060%           Anthem Inc.         ANTM         96,366.40         0.25%         1.15%         0.81%         7.00%         7.84%         0.0118%           Ann ple         AON         57,054.40         0.15%         0.81%         7.00%         7.84%         0.0118%           Smith (A.O.)         AOS         11,010.50         0.03%         1.52%         8.50%         10.08%         0.0029%           APA Corp.         APA         7,859.20         0.02%         0.48%         9.00%         9.92%         0.0103%           Air Products & Chem.         APD         66,011.30         0.17%	AMETEK Inc.	AME	30,372.80	0.08%	0.61%	10.00%	10.64%	0.0085%
Amer. Tower 'A'         AMT         109,436.90         0.29%         2.26%         9.50%         11.87%         0.0342%           Amazon.com         AMZN         1,628,827.10         4.29%         0.00%         28.50%         28.50%         1.2212%           Arista Networks         ANET         24,674.50         0.06%         0.00%         4.50%         4.50%         0.0029%           ANSYS Inc.         ANSS         28,449.70         0.07%         0.00%         8.00%         8.00%         0.0060%           Anthem Inc.         ANTM         96,366.40         0.25%         1.15%         10.00%         11.21%         0.0284%           Aon ple         AON         57,054.40         0.15%         0.81%         7.00%         7.84%         0.0118%           Smith (A.O.)         AOS         11,010.50         0.03%         1.52%         8.50%         10.08%         0.0029%           APA Corp.         APA         7,859.20         0.02%         0.48%         47.00%         47.59%         0.0098%           Air Products & Chem.         APD         66,011.30         0.17%         2.01%         12.00%         14.13%         0.0245%           Amphenol Corp.         APH         39,372.80 <th< td=""><td>Amgen</td><td>AMGN</td><td>143,036.80</td><td>0.38%</td><td>2.91%</td><td>5.50%</td><td>8.49%</td><td>0.0319%</td></th<>	Amgen	AMGN	143,036.80	0.38%	2.91%	5.50%	8.49%	0.0319%
Amazon.com         AMZN         1,628,827.10         4.29%         0.00%         28.50%         28.50%         1.2212%           Arista Networks         ANET         24,674.50         0.06%         0.00%         4.50%         4.50%         0.00299           ANSYS Inc.         ANSS         28,449.70         0.07%         0.00%         8.00%         8.00%         0.0060%           Anthem Inc.         ANTIM         96,366.40         0.25%         1.15%         10.00%         11.21%         0.0284%           Aon plc         AON         57,054.40         0.15%         0.81%         7.00%         7.84%         0.0118%           Smith (A.O.)         AOS         11,010.50         0.03%         1.52%         8.50%         10.08%         0.00299           APA Corp.         APA         7,859.20         0.02%         0.48%         47.00%         47.59%         0.0098%           Air Products & Chem.         APD         66,011.30         0.17%         2.01%         12.00%         14.13%         0.0245%           Amphenol Corp.         APH         39,372.80         0.10%         0.88%         9.00%         9.92%         0.0103%           Aptit V.C.         APT         37,361.80         0.10%	Ameriprise Fin'l	AMP	29,259.10	0.08%	1.79%	13.00%	14.91%	0.0115%
Arista Networks         ANET         24,674.50         0.06%         0.00%         4.50%         4.50%         0.0029%           ANYS Inc.         ANSS         28,449.70         0.07%         0.00%         8.00%         8.00%         0.0060%           Anhem Inc.         ANTM         96,366.40         0.25%         1.15%         10.00%         11.21%         0.0284%           Aon plc         AON         57,054.40         0.15%         0.81%         7.00%         7.84%         0.0118%           Smith (A.O.)         AOS         11,010.50         0.03%         1.52%         8.50%         10.08%         0.0029%           APA Corp.         APA         7,859.20         0.02%         0.48%         47.00%         47.59%         0.0098%           Ari Products & Chem.         APD         66,011.30         0.17%         2.01%         12.00%         14.13%         0.0245%           Amphenol Corp.         APH         39,372.80         0.10%         0.88%         9.00%         9.92%         0.0103%           Aptiv PLC         APTV         37,031.80         0.10%         0.00%         15.50%         15.50%         0.0151%           Altimos Energy         ATO         12,819.70         0.03% <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
ANSYS Inc.         ANSS         28,449.70         0.07%         0.00%         8.00%         8.00%         0.060%           Anthem Inc.         ANTM         96,366.40         0.25%         1.15%         10.00%         11.21%         0.0284%           Aon plc         AON         57,054.40         0.15%         0.81%         7.00%         7.84%         0.0118%           Smith (A.O.)         AOS         11,010.50         0.03%         1.52%         8.50%         10.08%         0.0029%           APA Corp.         APA         7,859.20         0.02%         0.48%         47.00%         47.59%         0.0098%           Air Products & Chem.         APD         66,011.30         0.17%         2.01%         12.00%         14.13%         0.024%           Amphenol Corp.         APH         39,372.80         0.10%         0.88%         9.00%         9.92%         0.0103%           Aptiv PLC         APTV         37,031.80         0.10%         0.88%         9.00%         9.92%         0.013%           Alexandria Real Estate         ARE         19,214.00         0.05%         2.52%         13.00%         15.68%         0.0079%           Atmos Energy         ATO         12,819.70         0.03%								
Anthem Inc.         ANTM         96,366.40         0.25%         1.15%         10.00%         11.21%         0.0284%           Aon plc         AON         57,054.40         0.15%         0.81%         7.00%         7.84%         0.0118%           Smith (A.O.)         AOS         11,010.50         0.03%         1.52%         8.50%         10.08%         0.0029%           APA Corp.         APA         7,859.20         0.02%         0.48%         47.00%         47.59%         0.0098%           Air Products & Chem.         APD         66,011.30         0.17%         2.01%         12.00%         14.13%         0.0245%           Amphenol Corp.         APH         39,372.80         0.10%         0.88%         9.00%         9.92%         0.0103%           Aptiv PLC         APT         37,031.80         0.10%         0.00%         15.50%         15.50%         0.015%           Alexandria Real Estate         ARE         19,214.00         0.05%         2.52%         13.00%         15.68%         0.0079%           Atmos Energy         ATO         12,819.70         0.03%         2.70%         7.00%         9.79%         0.0033%           Activision Blizzard         AVB         27,40.80								
Aon plc         AON         57,054.40         0.15%         0.81%         7.00%         7.84%         0.0118%           Smith (A.O.)         AOS         11,010.50         0.03%         1.52%         8.50%         10.08%         0.0029%           APA Corp.         APA         7,859.20         0.02%         0.48%         47.00%         47.59%         0.0098%           Air Products & Chem.         APD         66,011.30         0.17%         2.01%         12.00%         14.13%         0.0245%           Amphenol Corp.         APH         39,372.80         0.10%         0.88%         9.00%         9.92%         0.0103%           Aptiv PLC         APTV         37,031.80         0.10%         0.00%         15.50%         15.50%         0.0151%           Alexandria Real Estate         ARE         19,214.00         0.05%         2.52%         13.00%         15.68%         0.0079%           Atmos Energy         ATO         12,819.70         0.03%         2.70%         7.00%         9.79%         0.0033%           Atmos Energy         ATV         73,230.00         0.19%         0.50%         12.50%         13.03%         0.0251%           AvalonBay Communities         AVB         27,440.80								
Smith (A.O.)         AOS         11,010.50         0.03%         1.52%         8.50%         10.08%         0.0029%           APA Corp.         APA         7,859.20         0.02%         0.48%         47.00%         47.59%         0.0098%           Air Products & Chem.         APD         66,011.30         0.17%         2.01%         12.00%         14.13%         0.0245%           Amphenol Corp.         APH         39,372.80         0.10%         0.08%         9.00%         9.92%         0.0103%           Aptiv PLC         APTV         37,031.80         0.10%         0.00%         15.50%         15.50%         0.0151%           Alexandria Real Estate         ARE         19,214.00         0.05%         2.52%         13.00%         15.68%         0.0079%           Atmos Energy         ATO         12,819.70         0.03%         2.70%         7.00%         9.79%         0.0033%           Attivision Blizzard         ATVI         73,230.00         0.19%         0.50%         12.50%         13.03%         0.0251%           AvalonBay Communities         AVB         27,440.80         0.07%         3.29%         1.00%         4.31%         0.0031%           Broadcom Inc.         AVGO         18								
APA Corp.         APA         7,859.20         0.02%         0.48%         47.00%         47.59%         0.0098%           Air Products & Chem.         APD         66,011.30         0.17%         2.01%         12.00%         14.13%         0.0245%           Amphenol Corp.         APH         39,372.80         0.10%         0.88%         9.00%         9.92%         0.0103%           Aptiv PLC         APTV         37,031.80         0.10%         0.08%         9.00%         15.50%         0.0151%           Alexandria Real Estate         ARE         19,214.00         0.05%         2.52%         13.00%         15.68%         0.0079%           Atmos Energy         ATO         12,819.70         0.03%         2.70%         7.00%         9.79%         0.0033%           Activision Blizzard         ATVI         73,230.00         0.19%         0.50%         12.50%         13.03%         0.0251%           AvalonBay Communities         AVB         27,440.80         0.07%         3.29%         1.00%         4.31%         0.0031%           Avery Dennison         AVY         17,942.00         0.05%         1.26%         9.00%         10.32%         0.0049%           Amer. Water Works         AWR <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>								
Air Products & Chem.         APD         66,011.30         0.17%         2.01%         12.00%         14.13%         0.0245%           Amphenol Corp.         APH         39,372.80         0.10%         0.88%         9.00%         9.92%         0.0103%           Aptiv PLC         APTV         37,031.80         0.10%         0.00%         15.50%         15.50%         0.0151%           Alexandria Real Estate         ARE         19,214.00         0.05%         2.52%         13.00%         15.68%         0.0079%           Atmos Energy         ATO         12,819.70         0.03%         2.70%         7.00%         9.79%         0.0033%           Activision Blizzard         ATVI         73,230.00         0.19%         0.50%         12.50%         13.03%         0.0251%           AvalonBay Communities         AVB         27,440.80         0.07%         3.29%         1.00%         4.31%         0.0031%           Broadcom Inc.         AVGO         180,221.80         0.47%         3.26%         27.00%         30.70%         0.1456%           Avery Dennison         AVY         17,942.00         0.05%         1.26%         9.00%         10.32%         0.0049%           Amer. Express         AXP								
Amphenol Corp.         APH         39,372.80         0.10%         0.88%         9.00%         9.92%         0.0103%           Aptiv PLC         APTV         37,031.80         0.10%         0.00%         15.50%         15.50%         0.0151%           Alexandria Real Estate         ARE         19,214.00         0.05%         2.52%         13.00%         15.68%         0.0079%           Atmos Energy         ATO         12,819.70         0.03%         2.70%         7.00%         9.79%         0.033%           Activision Blizzard         ATVI         73,230.00         0.19%         0.50%         12.50%         13.03%         0.0251%           AvalonBay Communities         AVB         27,440.80         0.07%         3.29%         1.00%         4.31%         0.0031%           Broadcom Inc.         AVGO         180,221.80         0.47%         3.26%         27.00%         30.70%         0.1456%           Avery Dennison         AVY         17,942.00         0.05%         1.26%         9.00%         10.32%         0.0049%           Amer. Water Works         AWK         27,595.80         0.07%         1.59%         8.00%         9.65%         0.0070%           Amer. Express         AXP	· ·							
Aptiv PLC         APTV         37,031.80         0.10%         0.00%         15.50%         15.50%         0.0151%           Alexandria Real Estate         ARE         19,214.00         0.05%         2.52%         13.00%         15.68%         0.0079%           Atmos Energy         ATO         12,819.70         0.03%         2.70%         7.00%         9.79%         0.0033%           Activision Blizzard         ATVI         73,230.00         0.19%         0.50%         12.50%         13.03%         0.0251%           AvalonBay Communities         AVB         27,440.80         0.07%         3.29%         1.00%         4.31%         0.0031%           Broadcom Inc.         AVGO         180,221.80         0.47%         3.26%         27.00%         30.70%         0.1456%           Avery Dennison         AVY         17,942.00         0.05%         1.26%         9.00%         10.32%         0.0049%           Amer. Water Works         AWK         27,595.80         0.07%         1.59%         8.00%         9.65%         0.0070%           Amer. Express         AXP         124,557.70         0.33%         1.16%         8.50%         9.71%         0.0318%           AutoZone Inc.         AZO <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>								
Atmos Energy         ATO         12,819.70         0.03%         2.70%         7.00%         9.79%         0.0033%           Activision Blizzard         ATVI         73,230.00         0.19%         0.50%         12.50%         13.03%         0.0251%           AvalonBay Communities         AVB         27,440.80         0.07%         3.29%         1.00%         4.31%         0.0031%           Broadcom Inc.         AVGO         180,221.80         0.47%         3.26%         27.00%         30.70%         0.1456%           Avery Dennison         AVY         17,942.00         0.05%         1.26%         9.00%         10.32%         0.0049%           Amer. Water Works         AWK         27,595.80         0.07%         1.59%         8.00%         9.65%         0.0070%           Amer. Express         AXP         124,557.70         0.33%         1.16%         8.50%         9.71%         0.0318%           AutoZone Inc.         AZO         32,538.50         0.09%         0.00%         14.50%         14.50%         0.0124%           Boeing         BA         131,163.40         0.35%         0.00%         0.00%         0.00%         0.00%         0.00%         0.00%         0.00%         0.00%	Aptiv PLC	APTV						
Activision Blizzard         ATVI         73,230.00         0.19%         0.50%         12.50%         13.03%         0.0251%           AvalonBay Communities         AVB         27,440.80         0.07%         3.29%         1.00%         4.31%         0.0031%           Broadcom Inc.         AVGO         180,221.80         0.47%         3.26%         27.00%         30.70%         0.1456%           Avery Dennison         AVY         17,942.00         0.05%         1.26%         9.00%         10.32%         0.0049%           Amer. Water Works         AWK         27,595.80         0.07%         1.59%         8.00%         9.65%         0.0070%           Amer. Express         AXP         124,557.70         0.33%         1.16%         8.50%         9.71%         0.0318%           AutoZone Inc.         AZO         32,538.50         0.09%         0.00%         14.50%         0.0124%           Boeing         BA         131,163.40         0.35%         0.00%         0.00%         0.00%         0.00%           Bark of America         BAC         363,074.60         0.96%         1.72%         5.00%         6.76%         0.0646%           Baxter Int'l Inc.         BAX         41,460.80         0.11%	Alexandria Real Estate	ARE	19,214.00	0.05%	2.52%	13.00%	15.68%	0.0079%
AvalonBay Communities         AVB         27,440.80         0.07%         3.29%         1.00%         4.31%         0.0031%           Broadcom Inc.         AVGO         180,221.80         0.47%         3.26%         27.00%         30.70%         0.1456%           Avery Dennison         AVY         17,942.00         0.05%         1.26%         9.00%         10.32%         0.0049%           Amer. Water Works         AWK         27,595.80         0.07%         1.59%         8.00%         9.65%         0.0070%           Amer. Express         AXP         124,557.70         0.33%         1.16%         8.50%         9.71%         0.0318%           AutoZone Inc.         AZO         32,538.50         0.09%         0.00%         14.50%         14.50%         0.0124%           Boeing         BA         131,163.40         0.35%         0.00%	Atmos Energy	ATO	12,819.70	0.03%	2.70%	7.00%	9.79%	0.0033%
Broadcom Inc.         AVGO         180,221.80         0.47%         3.26%         27.00%         30.70%         0.1456%           Avery Dennison         AVY         17,942.00         0.05%         1.26%         9.00%         10.32%         0.0049%           Amer. Water Works         AWK         27,595.80         0.07%         1.59%         8.00%         9.65%         0.0070%           Amer. Express         AXP         124,557.70         0.33%         1.16%         8.50%         9.71%         0.0318%           AutoZone Inc.         AZO         32,538.50         0.09%         0.00%         14.50%         14.50%         0.0124%           Boeing         BA         131,163.40         0.35%         0.00%         0.00%         0.00%         0.0	Activision Blizzard		73,230.00	0.19%	0.50%	12.50%	13.03%	0.0251%
Avery Dennison         AVY         17,942.00         0.05%         1.26%         9.00%         10.32%         0.0049%           Amer. Water Works         AWK         27,595.80         0.07%         1.59%         8.00%         9.65%         0.0070%           Amer. Express         AXP         124,557.70         0.33%         1.16%         8.50%         9.71%         0.0318%           AutoZone Inc.         AZO         32,538.50         0.09%         0.00%         14.50%         0.0124%           Boeing         BA         131,163.40         0.35%         0.00%         0.00%         0.00%         0.000%           Bank of America         BAC         363,074.60         0.96%         1.72%         5.00%         6.76%         0.0646%           Baxter Int'l Inc.         BAX         41,460.80         0.11%         1.36%         8.50%         9.92%         0.0108%           Best Buy Co.         BBY         29,332.00         0.08%         2.46%         8.50%         11.06%         0.0085%           Becton Dickinson         BDX         70,501.50         0.19%         1.40%         7.50%         8.95%         0.0166%           Franklin Resources         BEN         16,875.20         0.04%								
Amer. Water Works         AWK         27,595.80         0.07%         1.59%         8.00%         9.65%         0.0070%           Amer. Express         AXP         124,557.70         0.33%         1.16%         8.50%         9.71%         0.0318%           AutoZone Inc.         AZO         32,538.50         0.09%         0.00%         14.50%         14.50%         0.0124%           Boeing         BA         131,163.40         0.35%         0.00%         0.00%         0.00%         0.0066%         0.0066%         0.000%         0.000%         0.010%         0.008%         2.46%         8.50%         11.06%         0.0085%         8.95%         0.0166%         0.000%         0.000%         1.00%         0.0106%         0.0066%         0.000%         0.0006         0.0006%         0.0006%         0.0								
Amer. Express         AXP         124,557.70         0.33%         1.16%         8.50%         9.71%         0.0318%           AutoZone Inc.         AZO         32,538.50         0.09%         0.00%         14.50%         14.50%         0.0124%           Boeing         BA         131,163.40         0.35%         0.00%         0.00%         0.00%         0.000%           Bank of America         BAC         363,074.60         0.96%         1.72%         5.00%         6.76%         0.0646%           Baxter Int'l Inc.         BAX         41,460.80         0.11%         1.36%         8.50%         9.92%         0.0108%           Best Buy Co.         BBY         29,332.00         0.08%         2.46%         8.50%         11.06%         0.0085%           Becton Dickinson         BDX         70,501.50         0.19%         1.40%         7.50%         8.95%         0.0166%           Franklin Resources         BEN         16,875.20         0.04%         3.35%         10.50%         14.03%         0.0062%           Brown-Forman 'B'         BF/B         37,363.60         0.10%         0.92%         11.00%         11.07%         0.0118%           Biogen         BIIB         42,431.60         <	•							
AutoZone Inc.         AZO         32,538.50         0.09%         0.00%         14.50%         14.50%         0.0124%           Boeing         BA         131,163.40         0.35%         0.00%         0.00%         0.00%         0.000%           Bank of America         BAC         363,074.60         0.96%         1.72%         5.00%         6.76%         0.0646%           Baxter Int'l Inc.         BAX         41,460.80         0.11%         1.36%         8.50%         9.92%         0.0108%           Best Buy Co.         BBY         29,332.00         0.08%         2.46%         8.50%         11.06%         0.0085%           Becton Dickinson         BDX         70,501.50         0.19%         1.40%         7.50%         8.95%         0.0166%           Franklin Resources         BEN         16,875.20         0.04%         3.35%         10.50%         14.03%         0.0062%           Brown-Forman 'B'         BF/B         37,363.60         0.10%         0.92%         11.00%         11.09%         0.0118%           Bio-Rad Labs. 'A'         BIO         17,567.10         0.05%         0.00%         9.00%         9.00%         0.0042%			,					
Boeing         BA         131,163.40         0.35%         0.00%         0.00%         0.00%         0.0000%           Bank of America         BAC         363,074.60         0.96%         1.72%         5.00%         6.76%         0.0646%           Baxter Int'l Inc.         BAX         41,460.80         0.11%         1.36%         8.50%         9.92%         0.0108%           Best Buy Co.         BBY         29,332.00         0.08%         2.46%         8.50%         11.06%         0.0085%           Becton Dickinson         BDX         70,501.50         0.19%         1.40%         7.50%         8.95%         0.0166%           Franklin Resources         BEN         16,875.20         0.04%         3.35%         10.50%         14.03%         0.0062%           Brown-Forman 'B'         BF/B         37,363.60         0.10%         0.92%         11.00%         11.97%         0.0118%           Biogen         BIIB         42,431.60         0.11%         0.00%         1.00%         1.00%         0.0011%           Bio-Rad Labs. 'A'         BIO         17,567.10         0.05%         0.00%         9.00%         9.00%         0.0042%	•							
Bank of America         BAC         363,074.60         0.96%         1.72%         5.00%         6.76%         0.0646%           Baxter Int'l Inc.         BAX         41,460.80         0.11%         1.36%         8.50%         9.92%         0.0108%           Best Buy Co.         BBY         29,332.00         0.08%         2.46%         8.50%         11.06%         0.0085%           Becton Dickinson         BDX         70,501.50         0.19%         1.40%         7.50%         8.95%         0.0166%           Franklin Resources         BEN         16,875.20         0.04%         3.35%         10.50%         14.03%         0.0062%           Brown-Forman 'B'         BF/B         37,363.60         0.10%         0.92%         11.00%         11.97%         0.0118%           Biogen         BIIB         42,431.60         0.11%         0.00%         1.00%         1.00%         0.0011%           Bio-Rad Labs. 'A'         BIO         17,567.10         0.05%         0.00%         9.00%         9.00%         0.0042%								
Baxter Int'l Inc.         BAX         41,460.80         0.11%         1.36%         8.50%         9.92%         0.0108%           Best Buy Co.         BBY         29,332.00         0.08%         2.46%         8.50%         11.06%         0.0085%           Becton Dickinson         BDX         70,501.50         0.19%         1.40%         7.50%         8.95%         0.0166%           Franklin Resources         BEN         16,875.20         0.04%         3.35%         10.50%         14.03%         0.0062%           Brown-Forman 'B'         BF/B         37,363.60         0.10%         0.92%         11.00%         11.97%         0.0118%           Biogen         BIIB         42,431.60         0.11%         0.00%         1.00%         1.00%         0.0011%           Bio-Rad Labs. 'A'         BIO         17,567.10         0.05%         0.00%         9.00%         9.00%         0.0042%								
Best Buy Co.         BBY         29,332.00         0.08%         2.46%         8.50%         11.06%         0.0085%           Becton Dickinson         BDX         70,501.50         0.19%         1.40%         7.50%         8.95%         0.0166%           Franklin Resources         BEN         16,875.20         0.04%         3.35%         10.50%         14.03%         0.0062%           Brown-Forman 'B'         BF/B         37,363.60         0.10%         0.92%         11.00%         11.97%         0.0118%           Biogen         BIIB         42,431.60         0.11%         0.00%         1.00%         1.00%         0.0011%           Bio-Rad Labs. 'A'         BIO         17,567.10         0.05%         0.00%         9.00%         9.00%         0.0042%								
Becton Dickinson         BDX         70,501.50         0.19%         1.40%         7.50%         8.95%         0.0166%           Franklin Resources         BEN         16,875.20         0.04%         3.35%         10.50%         14.03%         0.0062%           Brown-Forman 'B'         BF/B         37,363.60         0.10%         0.92%         11.00%         11.97%         0.0118%           Biogen         BIIB         42,431.60         0.11%         0.00%         1.00%         1.00%         0.0011%           Bio-Rad Labs. 'A'         BIO         17,567.10         0.05%         0.00%         9.00%         9.00%         0.0042%								
Franklin Resources         BEN         16,875.20         0.04%         3.35%         10.50%         14.03%         0.0062%           Brown-Forman 'B'         BF/B         37,363.60         0.10%         0.92%         11.00%         11.97%         0.0118%           Biogen         BIIB         42,431.60         0.11%         0.00%         1.00%         1.00%         0.0011%           Bio-Rad Labs. 'A'         BIO         17,567.10         0.05%         0.00%         9.00%         9.00%         0.0042%	,		,					
Brown-Forman 'B'         BF/B         37,363.60         0.10%         0.92%         11.00%         11.97%         0.0118%           Biogen         BIIB         42,431.60         0.11%         0.00%         1.00%         1.00%         0.0011%           Bio-Rad Labs. 'A'         BIO         17,567.10         0.05%         0.00%         9.00%         9.00%         0.0042%								
Biogen         BIIB         42,431.60         0.11%         0.00%         1.00%         1.00%         0.0011%           Bio-Rad Labs. 'A'         BIO         17,567.10         0.05%         0.00%         9.00%         9.00%         0.0042%			,					
	Biogen		42,431.60			1.00%		
Bank of New York Mello BK 44,527.00 0.12% 2.44% 5.00% 7.50% 0.0088%								
	Bank of New York Mello	BK	44,527.00	0.12%	2.44%	5.00%	7.50%	0.0088%

Booking Holdings	BKNG	93,186.20	0.25%	0.00%	14.00%	14.00%	0.0343%
Baker Hughes	BKR	18,266.50	0.05%	2.85%	0.00%	2.85%	0.0014%
BlackRock Inc.	BLK	127,988.30	0.34%	1.97%	10.00%	12.07%	0.0406%
Ball Corp.	BLL	28,158.70	0.07%	0.70%	20.00%	20.77%	0.0154%
Bristol-Myers Squibb	BMY	146,362.90	0.39%	2.99%	56.50%	60.33%	0.2323%
Broadridge Fin'l	BR	18,460.80	0.05%	1.44%	8.50%	10.00%	0.0049%
Berkshire Hathaway 'B'	BRK/	0.00	0.00%	0.00%	0.00%	0.00%	0.0000%
Boston Scientific	BSX	58,854.30	0.15%	0.00%	17.50%	17.50%	0.0271%
BorgWarner	BWA	11,997.20	0.03%	1.36%	5.50%	6.90%	0.0022%
Boston Properties	BXP	17,041.90	0.04%	3.65%	1.50%	5.18%	0.0023%
Citigroup Inc.	С	159,186.70	0.42%	2.67%	5.00%	7.74%	0.0324%
Conagra Brands	CAG	18,060.40	0.05%	3.00%	5.00%	8.08%	0.0038%
Cardinal Health	CAH	16,278.50	0.04%	3.50%	11.50%	15.20%	0.0065%
Carrier Global	CARR	37,749.30	0.10%	1.11%	0.00%	1.11%	0.0011%
Caterpillar Inc.	CAT	129,748.90	0.34%	1.74%	8.50%	10.31%	0.0352%
Chubb Ltd.	CB	74,866.80	0.20%	1.88%	10.00%	11.97%	0.0332%
Choe Global Markets	CBOE	11,933.80	0.20%	1.50%	12.00%	13.59%	0.0230%
CBRE Group	CBRE	28,516.10	0.08%	0.00%	8.50%	8.50%	0.0064%
Crown Castle Int'l	CCI	78,559.20	0.21%	3.14%	8.50%	11.77%	0.0243%
Carnival Corp.	CCL	30,558.70	0.08%	0.00%	0.00%	0.00%	0.0000%
Cadence Design Sys.	CDNS	34,037.40	0.09%	0.00%	9.50%	9.50%	0.0085%
CDW Corp.	CDW	23,591.40	0.06%	0.95%	10.00%	11.00%	0.0068%
Celanese Corp.	CE	18,515.70	0.05%	1.65%	6.50%	8.20%	0.0040%
Cerner Corp.	CERN	23,668.10	0.06%	1.12%	8.00%	9.16%	0.0057%
CF Industries	CF	11,357.90	0.03%	2.30%	14.50%	16.97%	0.0051%
Citizens Fin'l Group	CFG	20,849.30	0.05%	3.25%	8.50%	11.89%	0.0065%
Church & Dwight	CHD	21,500.70	0.06%	1.15%	8.00%	9.20%	0.0052%
C.H. Robinson	CHRW	12,975.20	0.03%	2.14%	8.00%	10.23%	0.0035%
Charter Communic.	CHTR	128,226.90	0.34%	0.00%	26.50%	26.50%	0.0894%
Cigna Corp.	CI	93,099.00	0.24%	1.52%	11.00%	12.60%	0.0309%
Cincinnati Financial	CINF	19,248.50	0.05%	2.11%	10.50%	12.72%	0.0064%
Colgate-Palmolive	CL	70,393.10	0.19%	2.16%	4.50%	6.71%	0.0124%
Clorox Co.	CLX	22,466.90	0.06%	2.46%	6.50%	9.04%	0.0053%
Comerica Inc.	CMA	10,762.00	0.03%	3.53%	1.00%	4.55%	0.0033%
	CMCS	249,179.40	0.66%	1.84%	11.50%	13.45%	0.0013%
Comcast Corp.							
CME Group	CME	75,897.40	0.20%	1.70%	8.00%	9.77%	0.0195%
Chipotle Mex. Grill	CMG	36,809.20	0.10%	0.00%	18.50%	18.50%	0.0179%
Cummins Inc.	CMI	37,900.90	0.10%	2.08%	7.50%	9.66%	0.0096%
CMS Energy Corp.	CMS	18,302.20	0.05%	2.80%	7.50%	10.41%	0.0050%
Centene Corp.	CNC	41,300.50	0.11%	0.00%	9.50%	9.50%	0.0103%
CenterPoint Energy	CNP	13,497.20	0.04%	2.65%	8.00%	10.76%	0.0038%
Capital One Fin'l	COF	71,786.30	0.19%	1.02%	3.50%	4.54%	0.0086%
Cabot Oil & Gas 'A'	COG	7,189.60	0.02%	2.78%	14.50%	17.48%	0.0033%
Cooper Cos.	COO	18,754.70	0.05%	0.02%	13.50%	13.52%	0.0067%
ConocoPhillips	COP	75,000.70	0.20%	3.10%	8.50%	11.73%	0.0231%
Costco Wholesale	COST	168,058.00	0.44%	0.83%	9.50%	10.37%	0.0458%
Campbell Soup	CPB	14,644.40	0.04%	3.06%	5.00%	8.14%	0.0031%
Copart Inc.	CPRT	28,590.80	0.08%	0.00%	10.00%	10.00%	0.0075%
salesforce.com	CRM	203,411.50	0.54%	0.00%	39.50%	39.50%	0.2114%
Cisco Systems	CSCO	221,475.90	0.58%	2.82%	6.00%	8.90%	0.0519%
CSX Corp.	CSX	74,497.90	0.20%	1.14%	8.00%	9.19%	0.0180%
Cintas Corp.	CTAS	35,974.80	0.09%		13.50%	14.44%	0.0137%
Catalent Inc.				0.88%			
	CTLT	17,093.00	0.04%	0.00%	28.00%	28.00%	0.0126%
Cognizant Technology	CTSH	37,350.70	0.10%	1.36%	6.50%	7.90%	0.0078%
Corteva Inc.	CTVA	33,091.50	0.09%	1.27%	0.00%	1.27%	0.0011%
Citrix Sys.	CTXS	14,236.40	0.04%	1.28%	9.00%	10.34%	0.0039%
CVS Health	CVS	117,132.70	0.31%	2.24%	6.00%	8.31%	0.0256%
Chevron Corp.	CVX	198,679.20	0.52%	5.19%	23.50%	29.30%	0.1531%
Dominion Energy	D	62,045.90	0.16%	3.33%	12.00%	15.53%	0.0253%
Delta Air Lines	DAL	29,514.00	0.08%	0.00%	49.00%	49.00%	0.0380%
DuPont de Nemours	DD	44,823.30	0.12%	1.45%	0.00%	1.45%	0.0017%
Deere & Co.	DE	112,342.80	0.30%	1.00%	14.00%	15.07%	0.0445%
Discover Fin'l Svcs.	DFS	35,087.30	0.09%	1.53%	12.50%	14.13%	0.0130%
Dollar General	DG	49,055.10	0.13%	0.82%	10.50%	11.36%	0.0147%
Quest Diagnostics	DGX	17,120.40	0.05%	1.90%	7.00%	8.97%	0.0040%
Horton D.R.	DHI	32,915.40	0.09%	0.89%	10.50%	11.44%	0.0099%
Danaher Corp.	DHR	177,273.60	0.47%	0.34%	18.00%	18.37%	0.0857%
Disney (Walt)	DIS	301,469.80	0.79%	0.00%	14.00%	14.00%	0.0837%
Discovery Inc.	DISC	16,753.70	0.04%	0.00%	15.50%	15.50%	0.0068%
Discovery Inc.  Discovery Communic. 'C		16,753.70	0.04%	0.00%	0.00%	0.00%	0.0008%
•	DISC						
Dish Network 'A'	DISH	22,754.20	0.06%	0.00%	0.00%	0.00%	0.0000%
Digital Realty Trust	DLR	42,046.30	0.11%	3.13%	7.00%	10.24%	0.0113%
Dollar Tree Inc.	DLTR	25,389.70	0.07%	0.00%	9.50%	9.50%	0.0063%
Dover Corp.	DOV	21,210.50	0.06%	1.34%	6.50%	7.88%	0.0044%
Dow Inc.	DOW	51,206.10	0.13%	4.16%	0.00%	4.16%	0.0056%
Domino's Pizza	DPZ	16,767.40	0.04%	0.88%	13.00%	13.94%	0.0061%
Duke Realty Corp.	DRE	16,856.30	0.04%	2.35%	-2.50%	-0.18%	-0.0001%
Darden Restaurants	DRI	18,312.80	0.05%	2.52%	14.50%	17.20%	0.0083%
DTE Energy	DTE	26,889.30	0.07%	3.22%	6.00%	9.32%	0.0066%

Duke Energy	DUK	77,792.00	0.20%	3.88%	7.00%	11.02%	0.0225%
DaVita Inc.	DVA	13,087.10	0.03%	0.00%	14.50%	14.50%	0.0050%
Devon Energy	DVN	17,064.00	0.04%	1.74%	21.00%	22.92%	0.0103%
DXC Technology	DXC	9,394.60	0.02%	0.00%	1.50%	1.50%	0.0004%
DexCom Inc.	DXCM	32,132.40	0.08%	0.00%	27.50%	27.50%	0.0232%
Electronic Arts	EA	40,059.00	0.11%	0.50%	9.00%	9.52%	0.0100%
eBay Inc.	EBAY	40,717.00	0.11%	1.24%	16.50%	17.84%	0.0191%
Ecolab Inc.	ECL	60,998.90	0.16%	0.90%	9.00%	9.94%	0.0160%
Consol. Edison	ED	26,669.20	0.07%	4.01%	4.00%	8.09%	0.0057%
Equifax Inc.	EFX	28,408.40	0.07%	0.67%	10.50%	11.21%	0.0084%
Edison Int'l	EIX	21,870.50	0.06%	4.68%	23.50%	28.73%	0.0165%
Lauder (Estee)	EL	108,200.90	0.28%	0.74%	11.00%	11.78%	0.0335%
Eastman Chemical	EMN	17,008.20	0.04%	2.21%	9.00%	11.31%	0.0051%
Emerson Electric	EMR	55,964.00	0.15%	2.17%	9.00%	11.27%	0.0051%
Enphase Energy	ENPH	17,730.70	0.05%	0.00%	48.50%	48.50%	0.0226%
EOG Resources	EOG	47,004.00	0.12%	2.11%	12.50%	14.74%	0.0182%
Equinix Inc.	EQIX	64,078.40	0.17%	1.64%	17.00%	18.78%	0.0317%
Equity Residential	EQR	27,364.20	0.07%	3.28%	2.00%	5.31%	0.0038%
Eversource Energy	ES	28,590.90	0.08%	2.94%	5.50%	8.52%	0.0064%
Essex Property Trust	ESS	18,545.50	0.05%	2.93%	1.00%	3.94%	0.0019%
Eaton Corp. plc	ETN	56,889.90	0.15%	2.13%	5.50%	7.69%	0.0115%
Entergy Corp.	ETR	21,068.50	0.06%	3.73%	3.00%	6.79%	0.0038%
Etsy Inc.	ETSY	20,972.90	0.06%	0.00%	27.50%	27.50%	0.0152%
Evergy Inc.	EVRG	14,246.30	0.04%	3.51%	8.00%	11.65%	0.0044%
Edwards Lifesciences	EW	56,384.80	0.15%	0.00%	13.00%	13.00%	0.0193%
Exelon Corp.	EXC	44,492.60	0.12%	3.36%	5.50%	8.95%	0.0105%
Expeditors Int'l	EXPD	20,140.50	0.05%	0.97%	8.50%	9.51%	0.0050%
Expedia Group	EXPE	23,990.80	0.06%	0.00%	0.00%	0.00%	0.0000%
Extra Space Storage	EXR	19,037.70	0.05%	2.76%	3.50%	6.31%	0.0032%
Ford Motor	F	49,760.00	0.13%	0.00%	46.00%	46.00%	0.0602%
Diamondback Energy	FANG	12,318.20	0.03%	2.05%	0.00%	2.05%	0.0007%
Fastenal Co.	FAST	29,829.80	0.08%	2.16%	9.50%	11.76%	0.0092%
Facebook Inc.	FB	890,909.30	2.34%	0.00%	17.00%	17.00%	0.3984%
Fortune Brands Home	FBHS	14,275.60	0.04%	1.01%	10.00%	11.06%	0.0042%
Freep't-McMoRan Inc.	FCX	59,614.10	0.16%	0.79%	32.50%	33.42%	0.0524%
FedEx Corp.	FDX	81,706.80	0.21%	0.84%	11.00%	11.89%	0.0255%
FirstEnergy Corp.	FE	20,341.90	0.05%	4.22%	11.50%	15.96%	0.0085%
F5 Networks	FFIV	10,843.00	0.03%	0.00%	9.00%	9.00%	0.0026%
Fidelity Nat'l Info.	FIS	91,493.40	0.24%	1.06%	34.50%	35.74%	0.0860%
Fiserv Inc.	FISV	75,372.50	0.20%	0.00%	13.00%	13.00%	0.0258%
Fifth Third Bancorp	FITB	29,666.40	0.08%	2.59%	4.00%	6.64%	0.0052%
FLIR Systems	FLIR	7,532.60	0.02%	1.19%	6.50%	7.73%	0.0015%
FleetCor Technologies	FLT	22,674.10	0.06%	0.00%	11.00%	11.00%	0.0066%
FMC Corp.	FMC	15,019.30	0.04%	1.66%	8.50%	10.23%	0.0040%
Fox Corp. 'B'	FOX	0.00	0.00%	1.27%	0.00%	1.27%	0.0000%
Fox Corp. 'A'	FOXA	21,771.00	0.06%	1.23%	0.00%	1.23%	0.0007%
First Republic Bank	FRC	32,345.10	0.09%	0.48%	12.50%	13.01%	0.0111%
Federal Rity. Inv. Tru			0.02%	3.81%	-2.00%	1.77%	0.00111%
•	FRT	8,611.80					
Fortinet Inc.	FTNT	33,901.10	0.09%	0.00%	19.00%	19.00%	0.0169%
Fortive Corp.	FTV	23,397.10	0.06%	0.41%	13.50%	13.94%	0.0086%
Gen'l Dynamics	GD	53,275.40	0.14%	2.53%	5.00%	7.59%	0.0106%
Gen'l Electric	GE	114,740.30	0.30%	0.31%	14.50%	14.83%	0.0448%
Gilead Sciences	GILD	85,899.00	0.23%	4.15%	15.50%	19.97%	0.0451%
Gen'l Mills	GIS	38,298.70	0.10%	3.31%	3.50%	6.87%	0.0069%
Globe Life Inc.	GL	10,902.80	0.03%	0.75%	8.00%	8.78%	0.0025%
Corning Inc.	GLW	33,040.40	0.09%	2.22%	20.00%	22.44%	0.0195%
Gen'l Motors	GM	80,555.80	0.03%	0.00%	10.50%	10.50%	0.0193%
Generac Holdings	GNRC	21,777.30	0.06%	0.00%	21.00%	21.00%	0.0120%
Alphabet Inc. 'A'	GOOG	1,547,379.90	4.07%	0.00%	18.13%	18.13%	0.7380%
Alphabet Inc.	GOOG	1,558,891.80	4.10%	0.00%	15.00%	15.00%	0.6152%
Genuine Parts	GPC	18,727.50	0.05%	2.52%	7.00%	9.61%	0.0047%
Global Payments	GPN	57,487.90	0.15%	0.42%	16.50%	16.95%	0.0256%
Gap (The) Inc.	GPS	12,693.60	0.03%	1.41%	25.00%	26.59%	0.0089%
Garmin Ltd.	GRMN	26,548.50	0.07%	1.94%	9.00%	11.03%	0.0077%
Goldman Sachs	GS	123,314.30	0.32%	1.39%	7.00%	8.44%	0.0274%
Grainger (W.W.)	GWW	23,773.10	0.06%	1.42%	4.50%	5.95%	0.0274%
• , ,							
Halliburton Co.	HAL	20,038.10	0.05%	0.80%	7.00%	7.83%	0.0041%
Hasbro Inc.	HAS	12,908.90	0.03%	2.90%	12.50%	15.58%	0.0053%
Huntington Bancshs.	HBAN	15,912.20	0.04%	3.84%	4.50%	8.43%	0.0035%
Hanesbrands Inc.	HBI	6,768.90	0.02%	3.09%	6.50%	9.69%	0.0017%
HCA Healthcare	HCA	67,967.50	0.18%	0.94%	10.50%	11.49%	0.0205%
Home Depot	HD	338,662.70	0.89%	2.10%	8.00%	10.18%	0.0907%
Hess Corp.	HES	25,517.00	0.07%	1.21%	0.00%	1.21%	0.0008%
HollyFrontier Corp.	HFC	5,625.40	0.01%	0.00%	2.50%	2.50%	0.0004%
Hartford Fin'l Svcs.	HIG	23,635.20	0.01%	2.12%	5.50%	7.68%	0.0004%
Huntington Ingalls	HII	8,591.20	0.02%	2.14%	3.50%	5.68%	0.0013%
Hilton Worldwide Hldgs	HLT	33,582.10	0.09%	0.00%	26.50%	26.50%	0.0234%
Hologic Inc.	HOLX	16,066.60	0.04%	0.00%	14.50%	14.50%	0.0061%
Honeywell Int'l	HON	153,719.10	0.40%	1.68%	9.50%	11.26%	0.0455%

Hewlett Packard Ent.	HPE	20,964.00	0.06%	2.98%	6.50%	9.58%	0.0053%
HP Inc.	HPQ	39,845.40	0.10%	2.45%	11.50%	14.09%	0.0148%
Hormel Foods	HRL	24,830.60	0.07%	2.17%	9.00%	11.27%	0.0074%
Schein (Henry)	HSIC	11,129.60	0.03%	0.00%	6.50%	6.50%	0.0019%
Host Hotels & Resorts	HST	11,998.90	0.03%	0.00%	8.00%	8.00%	0.0025%
Hershey Co.	HSY	35,656.60	0.09%	1.91%	5.50%	7.46%	0.0070%
Humana Inc.	HUM	57,291.60	0.15%	0.63%	11.00%	11.66%	0.0176%
Howmet Aerospace	HWM	14,578.10			6.00%		
•		,	0.04%	0.00%		6.00%	0.0023%
Int'l Business Mach.	IBM	127,819.00	0.34%	4.58%	1.50%	6.11%	0.0206%
Intercontinental Exch.	ICE	62,346.60	0.16%	1.19%	8.00%	9.24%	0.0152%
IDEXX Labs.	IDXX	45,084.70	0.12%	0.00%	13.50%	13.50%	0.0160%
IDEX Corp.	IEX	16,532.40	0.04%	0.99%	7.50%	8.53%	0.0037%
Int'l Flavors & Frag.	IFF	35,318.20	0.09%	2.23%	7.50%	9.81%	0.0091%
Illumina Inc.	ILMN	56,461.10	0.15%	0.00%	10.50%	10.50%	0.0156%
Incyte Corp.	INCY	17,963.40	0.05%	0.00%	66.50%	66.50%	0.0314%
IHS Markit	INFO	40,854.20	0.11%	0.78%	10.50%	11.32%	0.0122%
Intel Corp.	INTC	223,543.70	0.59%	2.51%	7.00%	9.60%	0.0564%
Intuit Inc.	INTU	110,294.20	0.29%	0.59%	14.50%	15.13%	0.0439%
	IP						
Int'l Paper		24,641.80	0.06%	3.26%	11.00%	14.44%	0.0094%
Interpublic Group	IPG	12,814.40	0.03%	3.38%	12.00%	15.58%	0.0053%
IPG Photonics	IPGP	10,678.10	0.03%	0.00%	18.50%	18.50%	0.0052%
IQVIA Holdings	IQV	44,585.30	0.12%	0.00%	13.50%	13.50%	0.0158%
Ingersoll Rand Inc.	IR	20,020.70	0.05%	0.00%	0.00%	0.00%	0.0000%
Iron Mountain	IRM	12,161.20	0.03%	5.89%	11.50%	17.73%	0.0057%
Intuitive Surgical	ISRG	96,728.10	0.25%	0.00%	15.00%	15.00%	0.0382%
Gartner Inc.	IT	19,778.90	0.05%	0.00%	15.50%	15.50%	0.0081%
Illinois Tool Works	ITW	73,361.50	0.19%	1.96%	9.00%	11.05%	0.0213%
Invesco Ltd.	IVZ	12,303.90	0.03%	2.54%	12.00%	14.69%	0.0048%
Jacobs Engineering	J	17,762.00	0.05%	0.62%	12.50%	13.16%	0.0061%
Hunt (J.B.)	JBHT	18,096.20	0.05%	0.71%	8.00%	8.74%	0.0042%
Johnson Ctrls. Int'l p	JCI	45,332.20	0.12%	1.71%	8.50%	10.28%	0.0123%
Henry (Jack) & Assoc.	JKHY	11,406.80	0.03%	1.20%	9.00%	10.25%	0.0031%
Johnson & Johnson	JNJ	447,769.90	1.18%	2.49%	8.50%	11.10%	0.1307%
Juniper Networks	JNPR	8,512.40	0.02%	3.15%	7.00%	10.26%	0.0023%
JPMorgan Chase	JPM	491,294.30	1.29%	2.23%	6.50%	8.80%	0.1138%
Kellogg	K	22,486.40	0.06%	3.53%	3.00%	6.58%	0.0039%
KeyCorp	KEY	22,272.20	0.06%	3.23%	9.50%	12.88%	0.0075%
Keysight Technologies	KEYS	25,737.30	0.07%	0.00%	12.00%	12.00%	0.0081%
Kraft Heinz Co.	KHC	53,286.10	0.14%	3.67%	1.50%	5.20%	0.0073%
Kimco Realty	KIM	8,862.30	0.02%	3.90%	-2.00%	1.86%	0.0004%
KLA Corp.	KLAC	46,588.50	0.12%	1.18%	17.50%	18.78%	0.0230%
Kimberly-Clark	KMB	44,759.00	0.12%	3.44%	5.50%	9.03%	0.0106%
Kinder Morgan Inc.	KMI	41,824.80	0.11%	5.85%	19.00%	25.41%	0.0280%
CarMax Inc.	KMX	18,897.30	0.05%	0.00%	11.00%	11.00%	0.0055%
Coca-Cola	КО	233,526.90	0.61%	3.10%	7.00%	10.21%	0.0627%
Kroger Co.	KR	27,591.20	0.07%	2.14%	5.00%	7.19%	0.0052%
Kansas City South'n	KSU	26,875.80	0.07%	0.73%	10.50%	11.27%	0.0080%
Loews Corp.	L	15,679.40	0.04%	0.43%	21.50%	21.98%	0.0091%
L Brands	LB	18,712.20	0.05%	0.89%	28.50%	29.52%	0.0145%
		,					0.0041%
Leidos Hldgs.	LDOS	14,394.70	0.04%	1.33%	9.50%	10.89%	
Leggett & Platt	LEG	7,230.60	0.02%	3.10%	10.00%	13.26%	0.0025%
Lennar Corp.	LEN	29,724.30	0.08%	1.08%	7.00%	8.12%	0.0063%
Laboratory Corp.	LH	26,116.50	0.07%	0.00%	9.50%	9.50%	0.0065%
L3Harris Technologies	LHX	44,061.00	0.12%	1.90%	0.00%	1.90%	0.0022%
Linde plc	LIN	154,018.00	0.41%	1.50%	0.00%	1.50%	0.0061%
LKQ Corp.	LKQ	15,042.90	0.04%	0.00%	10.50%	10.50%	0.0042%
Lilly (Eli)	LLY	188,547.80	0.50%	1.73%	9.00%	10.81%	0.0536%
Lockheed Martin	LMT	107,154.70	0.28%	2.75%	7.50%	10.35%	0.0292%
Lincoln Nat'l Corp.	LNC	13,391.90	0.04%	2.50%	9.00%	11.61%	0.0041%
Alliant Energy	LNT	14,411.70	0.04%	2.79%	5.50%	8.37%	0.0032%
Lowe's Cos.	LOW	139,416.30	0.37%		15.50%	16.91%	
				1.31%			0.0620%
Lam Research	LRCX	85,877.90	0.23%	0.91%	13.00%	13.97%	0.0316%
Lumen Technologies	LUMN	15,941.80	0.04%	6.93%	2.50%	9.52%	0.0040%
Southwest Airlines	LUV	35,713.30	0.09%	0.00%	33.50%	33.50%	0.0315%
Las Vegas Sands	LVS	42,883.30	0.11%	0.00%	19.00%	19.00%	0.0214%
Lamb Weston Holdings	LW	11,265.40	0.03%	1.23%	2.50%	3.75%	0.0011%
LyondellBasell Inds.	LYB	36,898.10	0.10%	3.81%	4.50%	8.40%	0.0081%
Live Nation Entertain.	LYV	19,032.70	0.05%	0.00%	0.00%	0.00%	0.0000%
MasterCard Inc.	MA	358,092.20	0.94%	0.49%	12.50%	13.02%	0.1227%
Mid-America Apartment	MAA	17,784.70	0.05%	2.63%	0.50%	3.14%	0.0015%
Marriott Int'l	MAR	45,403.80	0.12%	0.00%	16.00%	16.00%	0.0191%
Masco Corp.	MAS	15,592.60	0.04%	1.53%	7.50%	9.09%	0.0037%
McDonald's Corp.	MCD		0.45%		10.00%	12.40%	0.0560%
· ·		171,714.90		2.29%			
Microchip Technology	MCHP	39,578.20	0.10%	1.12%	9.00%	10.17%	0.0106%
McKesson Corp.	MCK	31,632.80	0.08%	0.85%	9.00%	9.89%	0.0082%
Moody's Corp.	MCO	60,622.70	0.16%	0.77%	8.50%	9.30%	0.0148%
Mondelez Int'l	MDLZ	87,566.30	0.23%	2.17%	8.00%	10.26%	0.0236%
Medtronic plc	MDT	169,336.50	0.45%	1.91%	7.00%	8.98%	0.0400%
MetLife Inc.	MET	57,887.40	0.15%	2.96%	6.50%	9.56%	0.0146%

MGM Resorts Int'l	MGM	19,320.80	0.05%	0.03%	0.00%	0.03%	0.0000%
Mohawk Inds.	MHK	14,489.30	0.04%	0.00%	6.50%	6.50%	0.0025%
McCormick & Co.	MKC	23,982.40	0.06%	1.52%	5.50%	7.06%	0.0045%
MarketAxess Holdings	MKTX	16,841.50	0.04%	0.60%	14.50%	15.14%	0.0067%
Martin Marietta	MLM	22,697.40	0.06%	0.64%	6.00%	6.66%	0.0040%
Marsh & McLennan	MMC	68,297.30	0.18%	1.41%	9.50%	10.98%	0.0197%
3M Company	MMM	117,442.20	0.31%	2.92%	5.00%	7.99%	0.0247%
Monster Beverage	MNST	47,914.20	0.13%	0.00%	11.50%	11.50%	0.0145%
Altria Group	MO	91,551.90	0.24%	6.96%	6.00%	13.17%	0.0317%
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Mosaic Company	MOS	13,410.40	0.04%	0.85%	30.00%	30.98%	0.0109%
Marathon Petroleum	MPC	38,767.10	0.10%	3.90%	0.00%	3.90%	0.0040%
Monolithic Power Sys.	MPWR	14,626.70	0.04%	0.75%	17.50%	18.32%	0.0070%
Merck & Co.	MRK	200,884.30	0.53%	3.28%	8.00%	11.41%	0.0603%
Marathon Oil Corp.	MRO	9,160.30	0.02%	1.38%	49.00%	50.72%	0.0122%
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Morgan Stanley	MS	155,718.20	0.41%	1.63%	8.50%	10.20%	0.0418%
MSCI Inc.	MSCI	36,891.30	0.10%	0.79%	16.00%	16.85%	0.0164%
Microsoft Corp.	MSFT	1,831,666.00	4.82%	0.92%	15.00%	15.99%	0.7705%
Motorola Solutions	MSI	33,724.50	0.09%	1.43%	7.00%	8.48%	0.0075%
M&T Bank Corp.	MTB	20,815.60	0.05%	2.71%	8.00%	10.82%	0.0059%
Mettler-Toledo Int'l	MTD					11.50%	
		29,120.20	0.08%	0.00%	11.50%		0.0088%
Micron Technology	MU	89,601.50	0.24%	0.00%	12.50%	12.50%	0.0295%
Maxim Integrated	MXIM	25,312.10	0.07%	0.00%	8.00%	8.00%	0.0053%
Norwegian Cruise Line	NCLH	10,746.60	0.03%	0.00%	0.00%	0.00%	0.0000%
Nasdag Inc.	NDAQ	26,433.10	0.07%	1.34%	5.00%	6.37%	0.0044%
NextEra Energy	NEE	142,413.60	0.37%	2.12%	10.50%	12.73%	0.0477%
Newmont Corp.							
•	NEM	59,013.60	0.16%	2.99%	14.50%	17.71%	0.0275%
Netflix Inc.	NFLX	216,238.40	0.57%	0.00%	23.50%	23.50%	0.1337%
NiSource Inc.	NI	9,873.80	0.03%	3.49%	9.50%	13.16%	0.0034%
NIKE Inc. 'B'	NKE	209,943.80	0.55%	0.83%	23.50%	24.43%	0.1349%
NortonLifeLock Inc.	NLOK	15,485.10	0.04%	1.89%	7.00%	8.96%	0.0036%
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Nielsen Hldgs. plc	NLSN	9,747.50	0.03%	0.88%	0.00%	0.88%	0.0002%
Northrop Grumman	NOC	61,835.30	0.16%	1.69%	7.00%	8.75%	0.0142%
NOV Inc.	NOV	6,445.80	0.02%	0.00%	0.00%	0.00%	0.0000%
ServiceNow Inc.	NOW	90,778.20	0.24%	0.00%	44.50%	44.50%	0.1063%
NRG Energy	NRG	8,402.80	0.02%	3.79%	0.00%	3.79%	0.0008%
Norfolk Southern	NSC	69,929.90	0.18%	1.42%	9.00%	10.48%	0.0193%
NetApp Inc.	NTAP	17,329.30	0.05%	2.68%	5.50%	8.25%	0.0038%
Northern Trust Corp.	NTRS	24,423.10	0.06%	2.39%	5.00%	7.45%	0.0048%
Nucor Corp.	NUE	30,382.00	0.08%	1.60%	2.50%	4.12%	0.0033%
NVIDIA Corp.	NVDA	348,830.60	0.92%	0.11%	14.50%	14.62%	0.1341%
NVR Inc.	NVR	17,392.20	0.05%	0.00%	8.00%	8.00%	0.0037%
Newell Brands	NWL	11,983.50	0.03%	3.27%	0.00%	3.27%	0.0010%
News Corp. 'B'	NWS	14,353.90	0.04%	0.81%	0.00%	0.81%	0.0003%
News Corp. 'A'	NWSA	15,366.30	0.04%	0.77%	0.00%	0.77%	0.0003%
NXP Semi. NV	NXPI	54,675.80	0.14%	1.15%	11.00%	12.21%	0.0176%
Realty Income Corp.	0	23,723.20	0.06%	4.39%	6.00%	10.52%	0.0066%
Old Dominion Freight	ODFL				9.00%	9.31%	
•		30,632.20	0.08%	0.30%			0.0075%
ONEOK Inc.	OKE	23,550.90	0.06%	7.23%	9.50%	17.07%	0.0106%
Omnicom Group	OMC	17,671.10	0.05%	3.47%	6.00%	9.57%	0.0045%
Oracle Corp.	ORCL	227,952.30	0.60%	1.63%	9.50%	11.21%	0.0672%
O'Reilly Automotive	ORLY	37,829.10	0.10%	0.00%	11.00%	11.00%	0.0109%
Otis Worldwide	OTIS	33,242.40	0.09%	1.24%	0.00%	1.24%	0.0011%
Occidental Petroleum		23,400.80					
	OXY		0.06%	0.48%	36.50%	37.07%	0.0228%
Paycom Software	PAYC	18,474.20	0.05%	0.00%	19.50%	19.50%	0.0095%
Paychex Inc.	PAYX	35,630.10	0.09%	2.67%	6.50%	9.26%	0.0087%
People's United Fin'l	PBCT	8,043.40	0.02%	3.85%	2.50%	6.40%	0.0014%
PACCAR Inc.	PCAR	31,687.10	0.08%	3.62%	5.50%	9.22%	0.0077%
Healthpeak Properties	PEAK	17,902.00	0.05%	3.61%	-13.00%	-9.62%	-0.0045%
Public Serv. Enterpris	PEG	31,237.90	0.08%	3.32%	3.50%	6.88%	0.0057%
Penn Nat'l Gaming	PENN	12,229.70	0.03%	0.00%	27.00%	27.00%	0.0087%
PepsiCo Inc.	PEP	200,984.30	0.53%	2.96%	6.00%	9.05%	0.0478%
Pfizer Inc.	PFE	221,733.60	0.58%	3.92%	9.50%	13.61%	0.0794%
Principal Fin'l Group	PFG	17,786.40	0.05%	3.75%	6.00%	9.86%	0.0046%
Procter & Gamble	PG	334,428.70	0.88%	2.55%	7.00%	9.64%	0.0848%
Progressive Corp.							
	PGR	59,105.20	0.16%	0.40%	9.00%	9.42%	0.0146%
Parker-Hannifin	PH	39,358.20	0.10%	1.35%	13.00%	14.44%	0.0149%
PulteGroup Inc.	PHM	14,652.90	0.04%	1.03%	7.00%	8.07%	0.0031%
Packaging Corp.	PKG	14,322.20	0.04%	2.65%	5.00%	7.72%	0.0029%
PerkinElmer Inc.	PKI	15,984.00	0.04%	0.20%	11.00%	11.21%	0.0047%
Prologis	PLD	85,287.60	0.22%	2.23%	8.50%	10.82%	0.0243%
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Philip Morris Int'l	PM	150,100.40	0.39%	4.98%	6.50%	11.64%	0.0460%
PNC Financial Serv.	PNC	81,978.30	0.22%	2.38%	10.00%	12.50%	0.0270%
Pentair plc	PNR	11,128.80	0.03%	1.20%	11.00%	12.27%	0.0036%
Pinnacle West Capital	PNW	9,632.00	0.03%	4.00%	5.50%	9.61%	0.0024%
Pool Corp.	POOL	17,150.00	0.05%	0.75%	15.00%	15.81%	0.0071%
PPG Inds.	PPG	41,811.00	0.11%	1.23%	10.00%	11.29%	0.0124%
PPL Corp.	PPL	22,598.10	0.06%	5.65%	3.00%	8.73%	0.0052%
Perrigo Co. plc	PRGO	5,956.80	0.02%	2.17%	-2.00%	0.15%	0.0000%
Prudential Fin'l	PRU	42,200.70	0.11%	4.32%	4.50%	8.92%	0.0099%

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Public Storage	PSA	48,278.90	0.13%	2.91%	2.50%	5.45%	0.0069%
Phillips 66	PSX	37,538.30	0.10%	4.20%	20.50%	25.13%	0.0248%
PTC Inc.	PTC	14,854.60	0.04%	0.00%	33.50%	33.50%	0.0131%
PVH Corp.	PVH	8,016.80	0.02%	0.00%	12.50%	12.50%	0.0026%
Quanta Services	PWR	12,727.30	0.03%	0.26%	13.50%	13.78%	0.0046%
Pioneer Natural Res.	PXD	25,179.80	0.07%	1.46%	17.50%	19.09%	0.0126%
PayPal Holdings	PYPL	286,706.40	0.75%	0.00%	16.00%	16.00%	0.1207%
Qualcomm Inc.	QCOM	147,515.10	0.39%	2.08%	16.50%	18.75%	0.0728%
Qorvo Inc.	QRVO	19,731.00	0.05%	0.00%	32.00%	32.00%	0.0166%
Royal Caribbean	RCL	21,378.10	0.06%	0.00%	0.00%	0.00%	0.0000%
Everest Re Group Ltd.	RE	10,763.40	0.03%	2.34%	11.00%	13.47%	0.0038%
Regency Centers Corp.	REG	10,521.80	0.03%	3.79%	10.00%	13.98%	0.0039%
Regeneron Pharmac.	REGN	54,417.20	0.14%	0.00%	12.50%	12.50%	0.0179%
Regions Financial	RF	21,779.60	0.06%	2.73%	9.00%	11.85%	0.0068%
Robert Half Int'l	RHI	9,921.70	0.03%	1.76%	7.50%	9.33%	0.0024%
Raymond James Fin'l	RJF	18,149.90	0.05%	1.18%	6.50%	7.72%	0.0037%
Ralph Lauren	RL	9,579.80	0.03%	1.57%	6.00%	7.62%	0.0019%
ResMed Inc.	RMD	28,209.90	0.07%	0.81%	13.50%	14.36%	0.0107%
Rockwell Automation	ROK	29,996.60	0.08%	1.68%	6.50%	8.23%	0.0065%
Rollins Inc.	ROL	17,194.80	0.05%	0.92%	11.50%	12.47%	0.0056%
Roper Tech.	ROP	45,387.50	0.12%	0.52%	8.00%	8.54%	0.0102%
Ross Stores	ROST	44,612.80	0.12%	0.91%	14.00%	14.97%	0.0176%
Republic Services	RSG	34,545.10	0.09%	1.64%	7.50%	9.20%	0.0084%
Raytheon Technologies	RTX	129,100.80	0.34%	2.39%	1.50%	3.91%	0.0133%
SBA Communications	SBAC	31,670.70	0.08%	0.84%	43.50%	44.52%	0.0371%
Starbucks Corp.	SBUX	129,180.30	0.34%	1.78%	16.00%	17.92%	0.0609%
Schwab (Charles)	SCHW	128,602.10	0.34%	1.05%	7.00%	8.09%	0.0274%
Sealed Air	SEE	8,391.90	0.02%	1.45%	13.50%	15.05%	0.0033%
Sherwin-Williams	SHW	74,803.80	0.20%	0.82%	10.00%	10.86%	0.0214%
SVB Fin'l Group	SIVB	29,209.80	0.08%	0.00%	8.00%	8.00%	0.0061%
Smucker (J.M.)	SJM	14,744.70	0.04%	2.72%	4.00%	6.77%	0.0026%
Schlumberger Ltd.	SLB	44,746.60	0.12%	1.56%	8.50%	10.13%	0.0119%
Snap-on Inc.	SNA	13,463.90	0.04%	2.04%	4.50%	6.59%	0.0023%
Synopsys Inc.	SNPS	36,165.10	0.10%	0.00%	12.50%	12.50%	0.0119%
Southern Co.	SO SDC	67,731.10	0.18%	4.13%	5.00%	9.23%	0.0165%
Simon Property Group	SPG	40,164.80	0.11%	4.25%	-0.50%	3.74%	0.0040%
S&P Global	SPGI	89,294.40	0.23%	0.83%	8.50%	9.37%	0.0220%
Sempra Energy	SRE	41,192.90	0.11%	3.27%	10.00%	13.43%	0.0146%
STERIS plc	STE	16,162.80	0.04%	0.85%	10.00%	10.89%	0.0046%
State Street Corp.	STT	29,696.90	0.08%	2.47%	6.50%	9.05%	0.0071%
Seagate Technology plc	STX	22,854.70	0.06%	2.69%	5.50%	8.26%	0.0050%
Constellation Brands	STZ	44,913.90	0.12%	1.31%	6.50%	7.85%	0.0093%
Stanley Black & Decker	SWK	36,900.20	0.10%	1.36%	6.00%	7.40%	0.0072%
Skyworks Solutions	SWKS	27,467.70	0.07%	1.20%	13.00%	14.28%	0.0103%
Synchrony Financial	SYF	26,656.40	0.07%	1.92%	9.50%	11.51%	0.0081%
Stryker Corp.	SYK	95,034.70	0.25%	1.00%	9.00%	10.05%	0.0251%
Sysco Corp.	SYY	41,491.60	0.11%	2.22%	10.00%	12.33%	0.0135%
AT&T Inc.	T	206,770.20	0.54%	7.18%	2.50%	9.77%	0.0531%
Molson Coors Beverage	TAP	11,814.20	0.03%	2.07%	41.00% 9.50%	43.49%	0.0135%
TransDigm Group	TDG	32,238.60	0.08%	0.00%		9.50%	0.0081%
Teledyne Technologies	TDY	14,920.00	0.04%	0.00%	9.00%	9.00%	0.0035%
TE Connectivity	TEL	43,848.50	0.12%	1.51%	8.00%	9.57%	0.0110%
Teradyne Inc.	TER	20,371.30	0.05%	0.33%	13.00%	13.35%	0.0072%
Truist Fin'l	TFC	81,450.30	0.21%	2.98%	5.50%	8.56%	0.0183% 0.0071%
Teleflex Inc.	TFX	18,248.10	0.05%	0.35%	14.50%	14.88%	
Target Corp. TJX Companies	TGT	109,697.10 80,898.50	0.29% 0.21%	1.24% 1.54%	12.50% 10.50%	13.82% 12.12%	0.0399% 0.0258%
Thermo Fisher Sci.	TJX TMO	179,594.20	0.21%	0.23%	13.00%	13.24%	0.0236%
T-Mobile US	TMUS	167,504.00	0.44%	0.23%	8.50%	8.50%	0.0020%
Tapestry Inc.	TPR		0.44%	0.00%	10.00%	10.00%	0.0373%
Trimble Inc.	TRMB	12,431.70 18,759.80		0.00%			0.0053%
Price (T. Rowe) Group	TROW	42,627.60	0.05% 0.11%	2.30%	12.50% 10.50%	12.50% 12.92%	0.0002%
Travelers Cos.	TRV	39,626.80	0.11%	2.24%	9.00%	11.34%	0.0143%
Tractor Supply	TSCO	20,987.10	0.16%	1.15%	9.50%	10.70%	0.0059%
Tesla Inc.	TSLA	542,611.90	1.43%	0.00%	0.00%	0.00%	0.0000%
Tyson Foods 'A'	TSN	29,068.60	0.08%	2.23%	6.00%	8.30%	0.0063%
Trane Technologies plc	TT	42,648.30	0.03%	1.32%	0.00%	1.32%	0.0005%
Take-Two Interactive	TTWO	20,640.10	0.11%	0.00%	15.50%	15.50%	0.0013%
Twitter Inc.	TWTR	42,234.60	0.05%	0.00%	39.50%	39.50%	0.0084%
Texas Instruments	TXN	167,771.70	0.11%	2.24%	5.50%	7.80%	0.0439%
Textron Inc.	TXT	15,022.20	0.44%	0.12%	7.50%	7.62%	0.0030%
Tyler Technologies	TYL	19,052.20	0.04%	0.12%	7.50% 8.00%	8.00%	0.0030%
Under Armour 'C'	UA	8,397.70	0.03%	0.00%	0.00%	0.00%	0.0040%
Under Armour 'A'	UAA	10,017.60	0.02%	0.00%	31.50%	31.50%	0.0000%
United Airlines Hldgs.	UAL	18,052.40	0.05%	0.00%	0.00%	0.00%	0.0003%
UDR Inc.	UDR	13,581.90	0.05%	3.21%	6.00%	9.31%	0.0000%
Universal Health `B'	UHS	13,348.80	0.04%	0.51%	10.00%	10.54%	0.0033%
Ulta Beauty	ULTA	17,965.50	0.04%	0.00%	12.50%	12.50%	0.0057%
UnitedHealth Group	UNH	386,568.00	1.02%	1.22%	12.50%	13.29%	0.0059%
o.mearicaidi Group	ONII	330,300.00	1.02/0	1.22/0	12.00/0	13.23/0	0.1332/0

Unum Group	UNM	6,184.00	0.02%	3.76%	3.00%	6.82%	0.0011%
Union Pacific	UNP	147,859.50	0.39%	1.92%	10.00%	12.02%	0.0467%
United Parcel Serv.	UPS	186,398.80	0.49%	1.90%	10.50%	12.50%	0.0613%
United Rentals	URI	23,257.00	0.06%	0.00%	7.50%	7.50%	0.0046%
U.S. Bancorp	USB	89,925.30	0.24%	2.80%	3.00%	5.84%	0.0138%
Visa Inc.	V	437,950.50	1.15%	0.60%	12.00%	12.64%	0.1456%
V.F. Corp.	VFC	33,116.50	0.09%	2.31%	5.50%	7.87%	0.0069%
ViacomCBS Inc.	VIAC	25,639.70	0.07%	2.42%	7.00%	9.50%	0.0064%
Valero Energy	VLO	31,589.10	0.08%	5.07%	13.00%	18.40%	0.0153%
Vulcan Materials	VMC	24,536.20	0.06%	0.80%	10.00%	10.84%	0.0070%
Vornado R'Ity Trust	VNO	8,614.80	0.02%	4.71%	-18.50%	-14.23%	-0.0032%
Verisk Analytics	VRSK	28,118.20	0.07%	0.67%	7.50%	8.20%	0.0061%
VeriSign Inc.	VRSN	24,585.20	0.06%	0.00%	8.50%	8.50%	0.0055%
Vertex Pharmac.	VRTX	55,402.30	0.15%	0.00%	28.50%	28.50%	0.0415%
Ventas Inc.	VTR	20,277.60	0.05%	3.42%	4.50%	8.00%	0.0043%
Viatris Inc.	VTRS	0.00	0.00%	0.00%	19.58%	19.58%	0.0000%
Verizon Communic.	VZ	235,652.70	0.62%	4.46%	3.50%	8.04%	0.0498%
Wabtec Corp.	WAB	14,732.30	0.04%	0.62%	9.50%	10.15%	0.0039%
Waters Corp.	WAT	18,953.00	0.05%	0.00%	12.00%	12.00%	0.0060%
Walgreens Boots	WBA	47,377.40	0.12%	3.41%	7.50%	11.04%	0.0138%
Western Digital	WDC	21,805.60	0.06%	0.00%	5.00%	5.00%	0.0029%
WEC Energy Group	WEC	29,925.30	0.08%	2.91%	6.50%	9.50%	0.0075%
Welltower Inc.	WELL	30,395.10	0.08%	3.41%	0.00%	3.41%	0.0027%
Wells Fargo	WFC	191,195.50	0.50%	0.87%	-0.50%	0.37%	0.0019%
Whirlpool Corp.	WHR	15,052.60	0.04%	2.34%	7.00%	9.42%	0.0037%
Willis Towers Wat. plc	WLTW	33,773.10	0.09%	1.09%	7.50%	8.63%	0.0077%
Waste Management	WM	58,732.70	0.15%	1.65%	7.00%	8.71%	0.0135%
Williams Cos.	WMB	31,600.40	0.08%	6.30%	10.50%	17.13%	0.0142%
Walmart Inc.	WMT	401,775.60	1.06%	1.55%	6.00%	7.60%	0.0803%
Berkley (W.R.)	WRB	14,005.50	0.04%	0.61%	13.50%	14.15%	0.0052%
WestRock Co.	WRK	15,541.90	0.04%	1.64%	6.50%	8.19%	0.0034%
West Pharmac. Svcs.	WST	24,538.00	0.06%	0.21%	14.50%	14.73%	0.0095%
Western Union	WU	10,158.90	0.03%	3.79%	6.00%	9.90%	0.0026%
Weyerhaeuser Co.	WY	27,913.40	0.07%	1.82%	20.50%	22.51%	0.0165%
Wynn Resorts	WYNN	14,606.20	0.04%	0.00%	0.00%	0.00%	0.0000%
Xcel Energy Inc.	XEL	37,972.10	0.10%	2.64%	6.00%	8.72%	0.0087%
Xilinx Inc.	XLNX	29,610.50	0.08%	0.00%	7.50%	7.50%	0.0058%
Exxon Mobil Corp.	XOM	249,694.10	0.66%	5.95%	32.00%	38.90%	0.2555%
Dentsply Sirona	XRAY	14,756.90	0.04%	0.59%	5.50%	6.11%	0.0024%
Xylem Inc.	XYL	20,338.40	0.05%	0.99%	10.50%	11.54%	0.0062%
Yum! Brands	YUM	35,613.00	0.09%	1.68%	10.50%	12.27%	0.0115%
Zimmer Biomet Hldgs.	ZBH	34,544.40	0.09%	0.60%	8.50%	9.13%	0.0083%
Zebra Techn. 'A'	ZBRA	25,937.40	0.07%	0.00%	11.00%	11.00%	0.0075%
Zions Bancorp.	ZION	9,405.40	0.02%	2.37%	7.00%	9.45%	0.0023%
Zoetis Inc.	ZTS	81,353.40	0.21%	0.58%	10.00%	10.61%	0.0227%

<sup>[1]</sup> Sum of [7]
[2] Source: Value Line
[3] Weight based on market capitalization
[4] Source: Value Line
[5] Source: Value Line

<sup>[6]</sup> Equals [4] x (1 + (0.5 x [5])) + [5] [7] Equals [3] x [6]

## **Capital Asset Pricing Model**

	[1]	[2]	[3]	[4]	[5]
			S&P 500 Estimated		
		Proxy Group	Required Market	Market Risk	
	Risk Free Rate	Average Beta	Return	Premium	CAPM ROE
Current 30-Year Treasury (30-day Average)	2.30%	0.88	14.02%	11.72%	12.65%
Current 30-Year Treasury (90-day Average)	2.21%	0.88	14.02%	11.81%	12.64%
Current 30-Year Treasury (180-day Average)	1.91%	0.88	14.02%	12.11%	12.61%
[6] Mean	•	•	•	•	12.64%

[1] Source: US Treasury Department

[2] Source: Attachment JC-6

[3] Source: Attachment JC-7

[4] Equals [3] - [1]

[5] Equals [1] + ([2] x [4])

[6] Equals Average of [5]

#### **Flotation Cost Adjustment**

			[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
									Gross Equity		
			Shares			Offering		Flotation	Issue Before		
			Issued		Underwriting	Expense	Net Proceeds	Costs	Costs	Net Proceeds	Flotation Cost
Company	Ticker	Completion Date	(000)	Offering Price	Discount	(\$000)	Per Share	(\$000)	(\$000)	(\$000)	Percentage
Atmos Energy Corporation	ATO	12/3/2018	8,059	\$92.75	\$0.98	\$1,000.00	\$91.65	\$8,873	\$747,500	\$738,627	1.19%
Atmos Energy Corporation	ATO	12/1/2017	4,558	\$86.79	NA	NA	\$86.65	\$8,692	\$403,692	\$395,000	2.15%
Chesapeake Utilities Corporation	CPK	9/22/2016	960	\$62.26	\$2.33	\$157.00	\$59.77	\$2,395	\$59,800	\$57,405	4.00%
Chesapeake Utilities Corporation	CPK	11/16/2006	690	\$30.10	\$1.13	\$225.00	\$28.65	\$1,002	\$20,779	\$19,778	4.82%
New Jersey Resources Corporation	NJR	12/9/2020	6,545	\$41.50	\$1.24	\$500.00	\$40.19	\$8,600	\$271,636	\$263,036	3.17%
NiSource Inc.	NI	9/8/2010	24,265	\$16.50	\$0.54	\$400.00	\$15.95	\$13,411	\$400,373	\$386,962	3.35%
NiSource Inc.	NI	11/6/2002	41,400	\$18.30	\$0.55	\$300.00	\$17.74	\$23,029	\$757,620	\$734,591	3.04%
Northwest Natural	NWN	6/7/2019	1,438	\$67.00	\$2.18	\$400.00	\$64.54	\$3,530	\$96,313	\$92,782	3.67%
Northwest Natural	NWN	11/16/2016	1,012	\$54.63	\$2.05	\$250.00	\$52.33	\$2,325	\$55,286	\$52,961	4.20%
South Jersey Industries	SJI	3/22/2021	11,788	\$22.25	\$0.78	\$300.00	\$21.45	\$9,480	\$262,272	\$252,792	3.61%
South Jersey Industries	SJI	4/23/2018	12,669	\$29.50	\$1.03	\$700.00	\$28.41	\$13,781	\$373,750	\$359,969	3.69%
Spire, Inc.	SR	5/10/2018	2,300	\$68.75	\$2.11	\$325.00	\$66.50	\$5,177	\$158,125	\$152,948	3.27%
Spire, Inc.	SR	5/17/2016	2,185	\$63.05	\$2.05	\$300.00	\$60.86	\$4,777	\$137,764	\$132,987	3.47%
Southwest Gas Corporation	SWX	11/30/2018	3,565	\$75.50	\$2.55	\$600.00	\$72.78	\$9,684	\$269,158	\$259,474	3.60%
Unitil Corporation	UTL	12/14/2017	690	\$48.30	\$1.93	\$400.00	\$45.79	\$1,733	\$33,327	\$31,594	5.20%
Unitil Corporation	UTL	5/16/2012	2,760	\$25.24	\$1.26	\$544.46	\$23.78	\$4,029	\$69,662	\$65,633	5.78%
Mean								\$7,532	\$257,316		

[1] Source: S&P Global

[2] Source: S&P Global; Company Prospectus Supplements

[3] Source: S&P Global; Company Prospectus Supplements

[4] Source: Company Prospectus Supplements

[5] Equals: ([1] x ([2] - [3]) - [4]) / [1]

[6] Equals ([1] x [3]) + [4]

[7] Equals [1] x [2]

[8] Equals [1] x [5]

[9] Equals [6] / [7]

Weighted Average Flotation Costs

001171

2.927%

# Constant Growth Discounted Cash Flow Model Earnings Growth 30 Day Average Stock Price

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
								Yahoo				
		Indicated	Weighted-			Adjusted for	Zacks	Finance	Value Line	Average		Flotation-
		Annual	Average Stock	k	Expected	Flotation	Earnings	Earnings	Earnings	Earnings		Adjusted
Company	Ticker	Dividend	Price	Dividend Yield	Dividend Yield	Costs	Growth	Growth	Growth	Growth	Mid ROE	ROE
Atmos Energy	ATO	\$2.65	\$101.26	2.62%	2.71%	2.79%	7.30%	7.17%	7.00%	7.16%	9.87%	9.95%
Chesapeake Utilities	CPK	\$1.96	\$118.66	1.65%	1.71%	1.76%	NA	4.74%	8.50%	6.62%	8.33%	8.38%
NiSource Inc.	NI	\$0.88	\$25.69	3.43%	3.54%	3.64%	6.40%	3.52%	9.50%	6.47%	10.01%	10.12%
New Jersey Resources	NJR	\$1.33	\$42.46	3.13%	3.21%	3.31%	7.10%	6.00%	2.00%	5.03%	8.24%	8.34%
Northwest Natural	NWN	\$1.92	\$54.40	3.53%	3.61%	3.72%	3.90%	3.80%	5.50%	4.40%	8.01%	8.12%
ONE Gas Inc.	OGS	\$2.40	\$77.52	3.10%	3.18%	3.27%	5.00%	5.00%	6.00%	5.33%	8.51%	8.61%
South Jersey Inds.	SJI	\$1.28	\$25.06	5.11%	5.29%	5.45%	5.40%	4.90%	11.50%	7.27%	12.56%	12.72%
Spire Inc.	SR	\$2.66	\$75.24	3.54%	3.67%	3.78%	5.50%	7.31%	10.00%	7.60%	11.27%	11.38%
Southwest Gas	SWX	\$2.42	\$69.03	3.51%	3.61%	3.72%	5.50%	4.00%	9.00%	6.17%	9.78%	9.89%
Mean				3.29%	3.39%	3.49%	5.76%	5.16%	7.67%	6.23%	9.62%	9.72%
Median				3.43%	3.54%	3.64%	5.50%	4.90%	8.50%	6.47%	9.78%	9.89%

[1] Source: Value Line

[2] Source: Yahoo Finance, as of May 25, 2021

[3] Equals [1] / [2]

[4] Equals [3] x (1 + 0.5 x [9])

[6] Source: Zacks

[7] Source: Yahoo Finance

[8] Source: Value Line

[9] Equals average ([6], [7], [8])

[10] Equals [4] + [9]

[11] Equals [5] + [9]

[12] Equals average of [11] - average of [10]

Weighted Average Flotation Costs	2.93%
Flotation-Adjusted ROE	9.72%
Unadjusted ROE	9.62%
Flotation Cost Adjustment	0.10%

[12]

#### **Small Size Premium**

	Unitil - Northern Utilities	
	Customers (000s)	35
[2]	Implied Equity (\$ Millions)	\$229.2
[3]	Implied Market Capitalization (\$ Millions)	\$414.9

# Proxy Group [4]

-		[4]	[5]	[6]
Company Name	Ticker	Customers (000s)	Market Cap (\$ Millions)	Market-to-Book Ratio
Atmos Energy	ATO	3,124	\$12,819.7	1.82
Chesapeake Utilities	CPK	158	\$2,033.5	2.88
NiSource Inc.	NI	3,482	\$9,873.8	2.43
New Jersey Resources	NJR	539	\$4,092.1	2.19
Northwest Natural	NWN	774	\$1,648.3	1.81
ONE Gas Inc.	OGS	2,179	\$3,888.5	1.76
South Jersey Inds.	SJI	391	\$2,893.7	1.57
Spire Inc.	SR	1,693	\$3,763.8	1.81
Southwest Gas	SWX	2,047	\$3,856.2	1.42
Mean		1,599	\$4,985.5	1.97
Median		1,693	\$3,856.2	1.81

### Duff & Phelps Size Premia [7]

	Market Capita	alization (\$ Millions)	
	Lowest in		
Decile	Decile	Highest in Decile	Size Premium
1	\$29,025.8	\$1,966,078.9	-0.22%
2	\$13,178.7	\$28,808.1	0.49%
3	\$6,743.4	\$13,177.8	0.71%
4	\$3,861.9	\$6,710.7	0.75%
5	\$2,445.7	\$3,836.5	1.09%
6	\$1,591.9	\$2,444.7	1.37%
7	\$911.6	\$1,591.8	1.54%
8	\$452.0	\$911.1	1.46%
9	\$190.0	\$451.8	2.29%
10	\$2.2	\$189.8	5.01%

	Lowest in		
Category	Category	Highest in Category	Size Premium
Mid Cap	\$2,445.7	\$13,177.8	0.78%
Low Cap	\$452.0	\$2,444.7	1.43%
Micro Cap	\$2.2	\$451.8	3.21%

[1] Source: Company data.

[2] Source: Company data. Schedule RevReq-6, Column 4, Line 1.

[3] Equals [2] x Median of [6]

[4] Source: Company 10ks

[5] Source: Value Line, as of May 25, 2021

[6] Source: Value Line

[7] Source: Duff & Phelps Cost of Capital Navigator

#### **Proxy Group Capital Structure**

#### **Common Equity Ratio**

#### Long-Term Debt Ratio

Company Name	Ticker	2016	2017	2018	2019	2020	Average
Atmos Energy	ATO	61.30%	56.00%	65.70%	62.00%	60.00%	61.00%
Chesapeake Utilities	CPK	76.50%	71.10%	62.10%	56.10%	57.80%	64.72%
NiSource Inc.	NI	40.20%	36.50%	37.90%	36.90%	32.90%	36.88%
New Jersey Resources	NJR	52.30%	55.40%	54.60%	50.20%	44.90%	51.48%
Northwest Natural	NWN	55.60%	52.10%	51.90%	51.80%	50.80%	52.44%
ONE Gas, Inc.	OGS	61.30%	62.20%	61.40%	62.30%	58.50%	61.14%
South Jersey Industries	SJI	61.50%	51.50%	37.60%	40.80%	37.40%	45.76%
Spire, Inc.	SR	49.10%	50.00%	54.30%	55.00%	51.00%	51.88%
Southwest Gas	SWX	51.80%	50.20%	51.70%	52.10%	49.50%	51.06%
Average		56.62%	53.89%	53.02%	51.91%	49.20%	52.93%

Company Name	Ticker	2016	2017	2018	2019	2020	Average
Atmos Energy	ATO	38.70%	44.00%	34.30%	38.00%	40.00%	39.00%
Chesapeake Utilities	CPK	23.50%	28.90%	37.90%	43.90%	42.20%	35.28%
NiSource Inc.	NI	59.80%	63.50%	55.30%	56.80%	61.20%	59.32%
New Jersey Resources	NJR	47.70%	44.60%	45.40%	49.80%	55.10%	48.52%
Northwest Natural	NWN	44.40%	47.90%	48.10%	48.20%	49.20%	47.56%
ONE Gas, Inc.	OGS	38.70%	37.80%	38.60%	37.70%	41.50%	38.86%
South Jersey Industries	SJI	38.50%	48.50%	62.40%	59.20%	62.60%	54.24%
Spire, Inc.	SR	50.90%	50.00%	45.70%	45.00%	49.00%	48.12%
Southwest Gas	SWX	48.20%	49.80%	48.30%	47.90%	50.50%	48.94%
Average		43.38%	46.11%	46.22%	47.39%	50.14%	46.65%

Source: Value Line